### (19) World Intellectual Property Organization

International Bureau



## . I DERIK BINGHAN IN BERRAK MUNIK BERRA ERANG EN IN IN BERRA BERRAK BING BINGE BING BARRAN BERRAK HERF HERF

(43) International Publication Date 27 January 2005 (27.01.2005)

**PCT** 

(10) International Publication Number WO 2005/007656 A1

(51) International Patent Classification<sup>7</sup>: A61K 31/437, A61P 31/18

C07D 471/10,

(21) International Application Number:

PCT/CA2004/001048

(22) International Filing Date:

16 July 2004 (16.07.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/487,973

18 July 2003 (18.07.2003) US

- (71) Applicant (for all designated States except US): VI-ROCHEM PHARMA INC. [CA/CA]; 275 Armand-Frappier Blvd., Laval, Québec H7V 4A7 (CA).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): CHAN CHUN KONG, Laval [CA/CA]; 27 Levere Street, Kirkland, Québec H9J 3X8 (CA). ZHANG, Ming-Qiang [NL/GB]; 26 Fennec Close, Cherry Hinton Cambridge CB1 9GG (GB). MOINET, Christophe [FR/CA]; 9306 Bretonvilliers Street, Montréal, Québec H2M 2A8 (CA). PROULX, Mélanie [CA/FR]; 17 du Général Zimmer Street, F-67000 Strasbourg (FR). REDDY, Thumkunta, Jagadeeswar [IN/CA]; 12546 Bedford Street, Pierrefonds, Quebec H9A 3K5 (CA). COURCHESNE, Marc [CA/CA]; 967 Ampère, Laval, Québec H7N 6H3 (CA).

- (74) Agent: OGILVY RENAULT; Suite 1600, 1981 McGill College Avenue, Montreal, Quebec H3A 2Y3 (CA).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

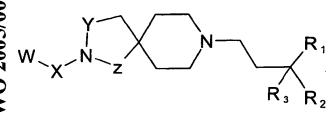
. ..

#### Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SPIRO COMPOUNDS AND M. THODS FOR THE MODULATION OF CHEMOKINE RECEPTOR ACTIVITY



**(I)** 

(57) Abstract: Novel compounds represented by formula (I): wherein Y, Z, X, W, R1, R2 and R3 are as defined herein, or pharmaceutically acceptable salts, hydrates or solvates thereof, are useful for the modulation of CCR5 chemokine receptor activity and the treatment or prevention of diseases associated therewith.

# SPIRO COMPOUNDS AND METHODS FOR THE MODULATION OF CHEMOKINE RECEPTOR ACTIVITY

This application claims the benefit of US provisional application 60/487,973 filed July 18, 2003, the entire disclosure of which is herein incorporated by reference.

### TECHNICAL FIELD

The present invention relates to novel spiro compounds and a method of modulating chemokine receptor activity using these compounds. The present invention is also directed to novel spiro compounds which are useful in the prevention or treatment of diseases associated with the modulation of CCR5 chemokine receptor activity. The present invention is further directed to a method of blocking cellular entry of HIV in a subject and to compositions using these compounds.

20

### BACKGROUND ART

Chemokines are chemotactic cytokines that are released by a wide variety of cells to attract macrophages, T cells, eosinophils, basophils and neutrophils to sites of inflammation and they also play a role in the maturation of cells of the immune system. Chemokines play an important role in immune and inflammatory responses in various diseases and disorders, including asthma, rhinitis and allergic diseases, as well as autoimmune pathologies such as rheumatoid arthritis and atherosclerosis. Chemokines are small 70 to 80 amino acid proteins with well-

characterized three-dimensional structures, usually stabilized by two disulfide bridges. They are divided into four families on the basis of pattern of conserved cysteine residues. Chemokine receptors have been designated such as, CCR1, CCR2, CCR2A, CCR2B, CCR3, CCR4, CCR5, CCR6, CCR7, CCR8, CCR9, CCR10, CXCR1, CXCR2, CXCR3, and CXCR4 and therefore agents which modulate these receptors may be useful in the prevention and treatment of diseases as mentioned above.

One of them, the C-C chemokines family, includes potent chemoattractants of monocytes and lymphocytes such as RANTES (Regulated on Activation, Normal T 15 Expressed and Secreted), eotaxin, MIP-1 $\alpha$  and MIP-1 $\beta$ (Macrophage Inflammatory Proteins) and human monocyte chemotactic proteins 1-3 (MCP-1, MCP-2 and MCP-3). More specifically, C-C chemokine receptor 5 (CCR5), a  $\beta$ -chemokine receptor with a seven-. 20 transmembrane-protein structure, was found to serve as a coreceptor for non-syncytium-inducing or macrophage-tropic HIV-1 (R5 viruses). It was also established that CCR5 is the principal chemokine receptor required for the entry of HIV into the cell 25 during primary infection. Therefore, interfering with the interaction between the viral receptor CCR5 and HIV can block HIV entry into the cell. It would therefore be useful to provide novel compounds which are modulators of chemokine receptor activity.

### DISCLOSURE OF THE INVENTION

In one aspect, the present invention provides novel compounds represented by formula (I):

5

$$W_X$$
 $N$ 
 $R_3$ 
 $R_2$ 
 $R_3$ 
 $R_2$ 

or pharmaceutically acceptable salts, hydrates or solvates thereof,

10

wherein Y, Z and X are each independently chosen from  $CH_2$ , C=0 or  $CR_4R_5$ ;

W is H, optionally substituted  $C_{1-10}$  alkyl (e.g.  $C_{1-6}$  alkyl) optionally substituted  $C_{2-10}$  alkenyl (e.g.  $C_{2-6}$  alkenyl), optionally substituted  $C_{2-10}$  alkynyl (e.g.  $C_{2-6}$  alkynyl), optionally substituted  $C_{6-12}$  aryl, optionally substituted 3 to 10 membered heterocycle, optionally substituted  $C_{6-12}$  aralkyl or optionally substituted  $C_{6-12}$  aralkyl;

 $R_1$  is H, OH, optionally substituted  $C_{1-10}$  alkyl (e.g.  $C_{1-6}$  alkyl), optionally substituted  $C_{2-10}$  alkenyl (e.g.  $C_{2-6}$  alkenyl), optionally substituted  $C_{2-10}$  alkynyl (e.g.  $C_{2-6}$  alkynyl), optionally substituted  $C_{6-12}$  aryl,  $NR_8R_9$ , optionally substituted  $O-C_{1-6}$  alkyl,

optionally substituted  $O-C_{6-12}$  aryl, optionally substituted  $O-C_{6-12}$  aralkyl,

 $R_2$  is optionally substituted  $C_{1-10}$  alkyl, optionally substituted  $C_{2-10}$  alkenyl, optionally substituted  $C_{2-10}$  alkynyl, optionally substituted  $C_{6-12}$  aryl or optionally substituted 3 to 10 membered heterocycle;

 $R_3$  is H, optionally substituted  $C_{1-10}$  alkyl (e.g.  $C_{1-6}$  alkyl), optionally substituted  $C_{2-10}$  alkenyl (e.g.  $C_{2-6}$  alkenyl), optionally substituted  $C_{2-10}$  alkynyl (e.g.  $C_{2-6}$  alkynyl), or optionally substituted  $C_{6-12}$  aryl;

 $R_4$  and  $R_5$  are each independently H, optionally substituted  $C_{1-10}$  alkyl (e.g.  $C_{1-6}$  alkyl), optionally substituted  $C_{2-10}$  alkenyl (e.g.  $C_{2-6}$  alkenyl), optionally substituted  $C_{2-10}$  alkynyl (e.g.  $C_{2-6}$  alkynyl), or optionally substituted  $C_{6-12}$  aryl;

 $R_6$  and  $R''_6$  are each independently H, optionally substituted  $C_{1-10}$  alkyl (e.g.  $C_{1-4}$  alkyl), optionally substituted  $C_{2-10}$  alkenyl (e.g.  $C_{2-4}$  alkenyl), or optionally substituted  $C_{2-10}$  alkynyl (e.g.  $C_{2-4}$  alkynyl) and  $R_7$  is H, optionally substituted  $C_{1-10}$  alkyl, optionally substituted  $C_{2-10}$  alkenyl, optionally substituted  $C_{2-10}$  alkynyl, optionally substituted  $C_{2-10}$  alkynyl, optionally substituted  $C_{6-12}$  aryl, optionally substituted  $C_{6-12}$  aralkyl or optionally substituted  $C_{6-12}$  aralkyl or optionally substituted  $C_{6-12}$  aralkyl or optionally substituted  $C_{6-12}$  aralkyl, or  $C_{6-12}$  and  $C_{6-12}$  are optionally substituted  $C_{6-12}$  and optionally substituted  $C_{6-12}$  are optionally substituted  $C_{6-12}$ 

15

 $R_8$  and  $R_9$  are each independently H, optionally substituted  $C_{1-10}$  alkyl (e.g.  $C_{1-6}$  alkyl), optionally substituted  $C_{2-10}$  alkenyl (e.g.  $C_{2-6}$  alkenyl), or optionally substituted  $C_{2-10}$  alkynyl (e.g.  $C_{2-6}$  alkynyl).

In another aspect, there is provided a method of modulating chemokine receptor activity in a subject comprising administering to the subject an effective amount of a compound of formula (I) or composition of the invention.

In still another aspect, there is provided a method for prevention or treatment of certain inflammatory diseases, immunoregulatory diseases, organ transplantation reactions and in the prevention and

treatment of infectious diseases such as HIV infections in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a compound of formula (I) or composition of the invention.

In still another aspect, there is provided a method for the prevention or treatment of diseases associated with the modulation of CCR5 chemokine

10 receptor activity in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a compound of formula (I) or composition of the invention.

In still another aspect, there is provided a method for blocking cellular entry of HIV in a subject comprising administering to the subject in need thereof an effective amount of a compound of formula (I) or composition of the invention to block HIV from cellular entry in said subject.

In still another aspect, there is provided a method for the prevention or treatment of diseases associated with the modulation of chemokine receptor activity in a subject in need of such treatment comprising administering to the subject a pharmaceutical combination comprising at least one compound of formula (I) and at least one further therapeutic agent.

In another aspect, there is provided a pharmaceutical formulation comprising the compound of the invention in combination with a pharmaceutically acceptable carrier or excipient.

5

15

In another aspect of the invention is the use of a compound according to formula (I), for the manufacture of a medicament for the prevention or treatment of diseases associated with the modulation of chemokine receptor activity.

In one embodiment, compounds of the present invention comprise those wherein the following embodiments are present, either independently or in combination.

In one embodiment, the present invention provides novel compounds represented by formula I:

$$W_X$$
 $N$ 
 $R_3$ 
 $R_2$ 
 $R_3$ 
 $R_2$ 

20

or pharmaceutically acceptable salts, hydrates or solvates thereof wherein Y, Z, X, W,  $R_1$ ,  $R_2$  and  $R_3$  are defined above.

In one embodiment, the present invention provides novel compounds represented by formula (Ia):

$$W_{X}$$
 $N$ 
 $R_{1}$ 
 $R_{3}$ 
 $R_{2}$ 
(Ia)

or pharmaceutically acceptable salts, hydrates or solvates thereof wherein Y, X, W,  $R_1$ ,  $R_2$  and  $R_3$  are defined above.

10 In one embodiment, the present invention provides novel compounds represented by formula (Ib):

$$W_{X}$$
 $N_{z}$ 
 $R_{3}$ 
 $R_{2}$ 
(Ib)

or pharmaceutically acceptable salts, hydrates or solvates thereof wherein Z, X, W,  $R_1$ ,  $R_2$  and  $R_3$  are defined above.

In one embodiment, the present invention provides novel compounds represented by formula (Ic):

20

or pharmaceutically acceptable salts, hydrates or solvates thereof wherein Y, Z, W,  $R_1$ ,  $R_2$  and  $R_3$  are 5 defined above.

In one embodiment, the present invention provides novel compounds represented by formula (Id):

$$W$$
 $N$ 
 $R_3$ 
 $R_2$ 
(Id)

or pharmaceutically acceptable salts, hydrates or solvates thereof wherein W,  $R_1$ ,  $R_2$  and  $R_3$  are defined above.

15

10

In one embodiment, the compounds of the present invention are in the (S)-enantiomer as represented by formula (Ie):

$$W_X$$
 $N$ 
 $R_1$ 
 $R_3$ 
 $R_2$ 
(Ie)

or pharmaceutically acceptable salts, hydrates or solvates thereof wherein Y, Z, X, W,  $R_1$ ,  $R_2$  and  $R_3$  are defined above.

In one embodiment, W is chosen from optionally substituted  $C_{6-12}$  aryl or optionally substituted 3 to 10 membered heterocycle.

10

In a further embodiment, W is optionally substituted  $C_{6-12}$  aryl.

In a further embodiment, W is optionally substituted 3 to 10 membered heterocycle.

15

In further embodiments:

W is phenyl;

W is phenyl substituted with a halogen;

W is phenyl substituted with Br;

20 W is phenyl substituted with F;

W is phenyl substituted with Cl;

W is phenyl substituted with at least one halogen;

W is phenyl substituted with a  $C_{1-3}$  alkoxy;

W is phenyl substituted with methoxy;

25 W is phenyl substituted with ethoxy;

W is phenyl substituted with SO<sub>2</sub>C<sub>1-3</sub>alkyl;

W is phenyl substituted with methanesulfonyl;

W is phenyl substituted with difluoromethoxy;

W is phenyl substituted with trifluoromethoxy;

W is phenyl substituted with trifluoromethyl;

5 W is phenyl substituted with CN;

W is phenyl substituted with pyrrazoyl;

W is phenyl optionally substituted in the para (p) position.

W is optionally substituted pyridine.

10

In a further embodiment,  $R_1$  is chosen from:

(V) · (VI)

In a further embodiment, R<sub>1</sub> is:

$$\begin{array}{c}
O \\
N \\
R_6
\end{array}$$

(II)

- 5 wherein  $R_6$  is as defined above and  $R_7$  is chosen from optionally substituted  $C_{1-10}$  alkyl, optionally substituted  $C_{6-12}$  aryl or optionally substituted 3 to 10 membered heterocycle.
- 10 In further embodiments,  $R_1$  is:



(II)

wherein:

15 R<sub>7</sub> is methyl;

R<sub>7</sub> is ethyl;

R<sub>7</sub> is isopropyl;

R<sub>7</sub> is cyclopropyl;

R<sub>7</sub> is cyclobutyl;

20 R<sub>7</sub> is cyclopentyl;

R<sub>7</sub> is cyclohexyl;

R<sub>7</sub> is cycloheptyl;

R<sub>7</sub> is 4,4-difluorocyclohexyl;

```
R<sub>7</sub> is CH<sub>2</sub>-cyclopropyl;
    R<sub>7</sub> is CH<sub>2</sub>-cyclobutyl;
    R<sub>7</sub> is CH<sub>2</sub>-cyclopentyl;
    R_7 is CH_2-cyclohexyl.
5
    R7 is phenyl;
    R7 is phenyl substituted with methyl;
    R<sub>7</sub> is phenyl substituted with at least one methyl;
    R<sub>7</sub> is phenyl substituted with a halogen;
10 R<sub>7</sub> is phenyl substituted with at least one halogen;
    R<sub>7</sub> is phenyl substituted with Cl;
    R7 is phenyl substituted with Br;
    R<sub>7</sub> is phenyl substituted with F;
    R<sub>7</sub> is phenyl substituted with at least one Cl;
15 R<sub>7</sub> is phenyl substituted with methoxy.
    R<sub>7</sub> is benzyl;
    R7 is benzyl substituted with methyl;
    R<sub>7</sub> is benzyl substituted with at least one methyl;
20 R<sub>7</sub> is benzyl substituted with a halogen;
    R_7 is benzyl substituted with at least one halogen;
    R7 is benzyl substituted with Cl;
    R<sub>7</sub> is benzyl substituted with Br;
    R<sub>7</sub> is benzyl substituted with F;
25 R<sub>7</sub> is benzyl substituted with at least one Cl;
    R<sub>7</sub> is benzyl substituted with methoxy.
    R<sub>7</sub> is optionally substituted pyridine.
    In a further embodiment, R_1 is:
30
```

wherein  $R_6$  and  $R^{''}_6$  are as defined above and  $R_7$  is optionally substituted  $C_{6-12}$  aryl, or  $R^{''}_6$  and  $R_7$  can be taken together to form an optionally substituted 3 to 10 membered heterocycle.

In a further embodiment,  $R_1$  is:

(III)

10

wherein:

R7 is phenyl;

R<sub>7</sub> is phenyl substituted with methyl;

15  $R_7$  is phenyl substituted with at least one methyl;

R<sub>7</sub> is phenyl substituted with a halogen;

 $R_7$  is phenyl substituted with at least one halogen;

R<sub>7</sub> is phenyl substituted with Cl;

R<sub>7</sub> is phenyl substituted with Br;

20 R<sub>7</sub> is phenyl substituted with F;

R<sub>7</sub> is phenyl substituted with at least one Cl;

 $R_7$  is phenyl substituted with methoxy;  $R_7$  is naphthyl.

 $R^{''}_{\ 6}$  and  $R_7$  can be taken together to form an optionally substituted piperidine.

5  $R_{\ 6}^{''}$  and  $R_{7}$  can be taken together to form an optionally substituted morpholine.

 $\mbox{R}^{''}_{6}$  and  $\mbox{R}_{7}$  can be taken together to form a morpholine.

 $R_{6}$  and  $R_{7}$  can be taken together to form an optionally substituted pyrrolidine.

 $R_{\ 6}^{''}$  and  $R_{\ 7}$  can be taken together to form a 3,3-difluoropyrrolidine.

In a further embodiment,  $R_1$  is:

15

wherein  $R_6$  is as defined above and  $R_7$  is optionally substituted  $C_{1-10}$  alkyl.

20 In further embodiments,  $R_1$  is:

(IV)

wherein:

R<sub>7</sub> is methyl;

R<sub>7</sub> is ethyl;

5 R<sub>7</sub> is tert-butyl;

R<sub>7</sub> is cyclobutyl;

R<sub>7</sub> is cyclopentyl;

R<sub>7</sub> is cyclohexyl.

10 In a further embodiment,  $R_1$  is:

(V)

wherein  $R_6$  is as defined above and  $R_7$  is chosen from optionally substituted  $C_{1\text{--}10}$  alkyl, optionally

15 substituted  $C_{6-12}$  aryl or optionally substituted 3 to 10 membered heterocycle.

In a further embodiment,  $R_1$  is:

(V)

wherein:

 $R_7$  is optionally substituted phenyl;

 $R_7$  is optionally substituted  $C_{1-10}$  alkyl;

5 R<sub>7</sub> is isopropyl.

In a further embodiment,  $R_1$  is:

(VI)

wherein  $R^{''}_{6}$  is as defined above and  $R_{7}$  is chosen from optionally substituted  $C_{1-10}$  alkyl or optionally substituted  $C_{6-12}$  aryl.

In a further embodiment,  $R_1$  is:

15

(VI)

wherein:

 $R_7$  is optionally substituted cyclohexyl.

 $R_7$  is optionally substituted phenyl.

In a further embodiment,  $R_2$  is chosen from optionally substituted  $C_{6\text{-}12}$  aryl or optionally substituted 3 to 10 membered heterocycle.

5

In further embodiments:

 $R_2$  is optionally substituted  $C_{6-12}$  aryl.

R<sub>2</sub> is phenyl;

R<sub>2</sub> is phenyl substituted with halogen;

10 R<sub>2</sub> is phenyl substituted with Cl;

 $R_2$  is phenyl substituted with at least one halogen;

R<sub>2</sub> is phenyl substituted with methoxy;

 $R_2$  is phenyl substituted with at least one methoxy.

In a further embodiments:

 $\ensuremath{\text{R}}_2$  is optionally substituted 3 to 10 membered heterocycle.

 $R_2$  is optionally substituted thienyl.

R<sub>2</sub> is optionally substituted pyridyl.

20

In a further embodiment,  $R_3$  is chosen from H or optionally substituted  $C_{i-4}$  alkyl.

In one embodiment, R<sub>3</sub> is H.

In one embodiment,  $R_3$  is methyl.

25

The compounds of the present invention may have an asymmetric center. As two optical isomers can independently be obtained from each asymmetric center, compounds of the invention having one

30 asymmetric center can be in the form of the enantiomers, i.e., the (+) enantiomer or (-)

enantiomer, in pure or partially purified form, as well as mixtures of enantiomers.

In one embodiment, the compounds of the present invention are the (+) enantiomer having an enantiomeric excess of 99%.

In one embodiment, the compounds of the present invention are the (+) enantiomer having an enantiomeric excess of 95%.

In one embodiment, the compounds of the present invention are the (+) enantiomer having an enantiomeric excess of 90%.

15

In one embodiment, the compounds of the present invention are the (-) enantiomer having an enantiomeric excess of 99%.

20 In one embodiment, the compounds of the present invention are the (-) enantiomer having an enantiomeric excess of 95%.

In one embodiment, the compounds of the present invention are the (-) enantiomer having an enantiomeric excess of 90%.

Compounds of the present invention have also two asymmetric centers. As two optical isomers can independently be obtained from each asymmetric center, compounds of the invention having two

asymmetric centers can be in the form of the diastereomers. It is intended that all the possible diastereomers in mixtures and as pure or partially purified compounds are included in this invention.

5

In one embodiment, the compounds of the present invention are in the form of the (R,R)-diastereomer;

In one embodiment, the compounds of the present

invention are in the form of the (S,R)-diastereomer;

In one embodiment, the compounds of the present invention are in the form of the (R,S)-diastereomer;

15 In one embodiment, the compounds of the present invention are in the form of the (S,S)-diastereomer.

In one embodiment, the compounds of the present invention are a (R,R)-diastereomer having an optical purity in excess of 99%.

In one embodiment, the compounds of the present invention are a (R,R)-diastereomer having an optical purity in excess of 95%.

25

In one embodiment, the compounds of the present invention are a (R,R)-diastereomer having an optical purity in excess of 90%.

In one embodiment, the compounds of the present invention are a (S,R)-diastereomer having an optical purity in excess of 99%.

5 In one embodiment, the compounds of the present invention are a (S,R)-diastereomer having an optical purity in excess of 95%.

In one embodiment, the compounds of the present invention are a (S,R)-diastereomer having an optical purity in excess of 90%.

In one embodiment, the compounds of the present invention are a (R,S)-diastereomer having an optical purity in excess of 99%.

In one embodiment, the compounds of the present invention are a (R,S)-diastereomer having an optical purity in excess of 95%.

20

In one embodiment, the compounds of the present invention are a (R,S)-diastereomer having an optical purity in excess of 90%.

25 In one embodiment, the compounds of the present invention are a (S,S)-diastereomer having an optical purity in excess of 99%.

In one embodiment, the compounds of the present

invention are a (S,S)-diastereomer having an optical purity in excess of 95%.

In one embodiment, the compounds of the present invention are a (S,S)-diastereomer having an optical purity in excess of 90%.

5

In one embodiment, there is provided a method of modulating chemokine receptor activity in a subject comprising administering to the subject a therapeutically effective amount of a compound of formula (I) or composition of the invention.

In another embodiment, there is provided a method for the prevention or treatment of diseases associated with the modulation of chemokine receptor activity in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a compound of formula (I) or composition of the invention.

- In a further embodiment, there is provided a method for prevention or treatment of certain inflammatory diseases, immunoregulatory diseases, organ transplantation reactions and in the prevention and treatment of infectious diseases such as HIV
- 25 infections in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a compound of formula (I) or composition of the invention.
- 30 In another embodiment, there is provided a method for the prevention or treatment of diseases

associated with the modulation of CCR5 chemokine receptor activity in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a compound of formula (I) or composition of the invention.

In still another aspect, there is provided a method for blocking cellular entry of HIV in a subject in need thereof comprising administering to the subject a therapeutically effective amount of a compound of formula (I) to block HIV from cellular entry in said subject.

In still another aspect, there is provided a method for prevention or treatment of HIV infections in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a compound of formula (I) or composition of the invention.

20

In still another aspect, there is provided a method for delaying the onset of AIDS or treating AIDS in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a compound of formula (I) or composition of the invention.

In a further embodiment, there is provided a method for the prevention or treatment of diseases

30 associated with the modulation of chemokine receptor activity in a subject in need of such treatment

comprising administering to the subject a pharmaceutical combination comprising at least one compound of formula (I) and at least one further therapeutic agent.

5

In a further embodiment, there is provided a method for the prevention or treatment of diseases associated with the modulation of CCR5 chemokine receptor activity in a subject in need of such treatment comprising administering to the subject a pharmaceutical combination comprising at least one compound of formula (I) and at least one further therapeutic agent.

15 In still another aspect, there is provided a method for blocking cellular entry of HIV in a subject or for the prevention or treatment of HIV infections in a subject in need of such treatment comprising administering to the subject a pharmaceutical combination comprising at least one compound of formula (I) and at least one further therapeutic agent.

In still another aspect, there is provided a method

25 for delaying the onset of AIDS or treating AIDS in a
 subject in need of such treatment comprising
 administering to the subject a pharmaceutical
 combination comprising at least one compound of
 formul. (I) and at least one further therapeutic

30 agent.

In another embodiment, there is provided a combination useful for the prevention or treatment of diseases associated with the modulation of chemokine receptor activity which is a therapeutically effective amount of a compound of formula (I) and therapeutically effective amount of

In one embodiment, combinations of the present
invention comprise those wherein the following
embodiments are present, either independently or in

at least one further therapeutic agent.

combination.

In a further embodiment, the pharmaceutical

combinations of this invention may contain at least one further therapeutic agent chosen from an agent used in inflammatory diseases, immunoregulatory diseases and in organ transplantation reactions.

- 20 In another embodiment, the pharmaceutical combination of this invention may contain at least one further therapeutic agent which is an antiviral agent.
- 25 In one embodiment, the pharmaceutical combination of this invention may contain at least one further antiviral agent which is chosen from nucleoside and nucleotide analog reverse transcriptase inhibitors, non-nucleoside reverse transcriptase inhibitors,
- 30 protease inhibitors, attachment and fusion

inhibitors, integrase inhibitors or maturation inhibitors.

In one embodiment, the pharmaceutical combinations 5 of this invention may contain at least one other antiviral agent which is a nucleoside and nucleotide analog reverse transcriptase inhibitors chosen from 3TC (lamivudine, Epivir®), AZT (zidovudine, Retrovir®), Emtricitabine (Coviracil®, formerly 10 FTC), d4T (2',3'-dideoxy-2',3'-didehydro-thymidine, stavudine and Zerit®), tenofovir (Viread®), 2',3'dideoxyinosine (ddl, didanosine, Videx®), 2',3'dideoxycytidine (ddC, zalcitabine, Hivid®), Combivir® (AZT/3TC or zidovudine/lamivudine 15 combination), Trivizir® (AZT/3TC/abacavir or zidovudine/lamivudine/- abacavir combination), abacavir (1592U89, Ziagen®), SPD-754, ACH-126,443 (Beta-L-Fd4C), Alovudine (MIV-310), DAPD (amdoxovir), Racivir, 9-[(2-hydroxymethyl)-1,3-20 dioxolan-4-yl]guanine or 2-amino-9-[(2hydroxymethyl)-1,3-dioxolan-4-yl]adenine.

In another embodiment, the pharmaceutical combination of this invention may contain at least one other antiviral agent which is a non-nucleoside reverse transcriptase inhibitor chosen from Nevirapine (Viramune®, NVP, BI-RG-587), delavirdine (Rescriptor®, DLV), efavirenz (DMP 266, Sustiva®), (+)-Calanolide A, Capravirine (AG1549, formerly S-1153), DPC083, MIV-150, TMC120, TMC125 or BHAP

(delavirdine), calanolides or L-697,661 (2-Pyridinone 3benzoxazolMeNH derivative).

In another embodiment, the pharmaceutical

5 combination of this invention may contain at least one other antiviral agent which ia a protease inhibitor chosen from nelfinavir (Viracept®, NFV), amprenavir (141W94, Agenerase®), indinavir (MK-639, IDV, Crixivan®), saquinavir (Invirase®, Fortovase®, SQV), ritonavir (Norvir®, RTV), lopinavir (ABT-378, Kaletra®), Atazanavir (BMS232632), mozenavir (DMP-450), fosamprenavir (GW433908), R0033-4649, Tipranavir (PNU-140690), TMC114 or VX-385.

- In another embodiment, the pharmaceutical combination of this invention may contain at least one other antiviral agent which is an attachment and fusion inhibitor chosen from T-20 (enfuvirtide, Fuzeon®), T-1249, Schering C (SCH-C), Schering D (SCH-D), FP21399, PRO-140, PRO 542, PRO 452, TNX-355, GW873140 (AK602), TAK-220, UK-427,857 or soluble CD4, CD4 fragments, CD4-hybrid molecules, BMS-806, BMS-488043, AMD3100, AMD070 or KRH-2731.
- 25 In another embodiment, the pharmaceutical combination of this invention may contain at least one other antiviral agent which is an integrase inhibitor chosen from S-1360, L-870,810, L-870,812 or C-2507.

In another embodiment, the pharmaceutical combination of this invention may contain at least one other antiviral agent which is a maturation inhibitor and is PA-457.

5

In another embodiment, the pharmaceutical combination of this invention may contain at least one other antiviral agent which is a zinc finger inhibitor and is azodicarbonamide (ADA).

10

In another embodiment, the pharmaceutical combination of this invention may contain at least one other antiviral agent which is an antisense drug and is HGTV43.

15

In another embodiment, the pharmaceutical combination of this invention may contain at least one other antiviral agent which is an immunomodulator, immune stimulator or cytokine chosen from interleukin-2 (IL-2, Aldesleukin, Proleukin), granulocyte macrophage colony stimulating factor (GM-CSF), erythropoietin, Multikine, Ampligen, thymomodulin, thymopentin, foscarnet, HE2000, Reticulose, Murabutide, Resveratrol, HRG214, HIV-1 Immunogen (Remune) or EP HIV-1090.

In another embodiment, the pharmaceutical combination of this invention may contain at least one other antiviral agent chosen from 2',3'-dideoxyadenosine, 3'-deoxythymidine, 2',3'-dideoxy-

2',3'-didehydrocytidine and ribavirin; acyclic
nucleosides such as acyclovir, ganciclovir;
interferons such as alpha-, beta-and gammainterferon; glucuronation inhibitors such as
5 probenecid; or TIBO drugs, HEPT, TSAO derivatives.

The combinations referred to above may conveniently be presented for use in the form of a pharmaceutical formulation and thus pharmaceutical formulations

10 comprising a combination as defined above together with a pharmaceutically acceptable carrier thereof comprises a further aspect of the invention.

The individual components of such combinations may

15 be administered either sequentially or

simultaneously in separate or combined

pharmaceutical formulations.

In a further embodiment, the said compound of
20 formula (I) and said therapeutic agent are
 administered sequentially.

In a further embodiment, the said compound of
 formula (I) and said therapeutic agent are
25 administered simultaneously.

The subject to which the compounds are administered can be, for example, a mammal or a human.

Preferably, the subject is a human.

In one embodiment, the present invention further provides a pharmaceutical composition comprising at least one compound having the formula (I) or pharmaceutically acceptable salts or

- 5 pharmaceutically acceptable hydrates or pharmaceutically acceptable solvates thereof and at least one pharmaceutically acceptable carrier or excipient.
- In another embodiment, the invention provides the use of a compound having the formula (I) for the manufacture of a medicament for prevention and treatment of diseases associated with the modulation of CCR5 chemokine receptor activity in a host
- 15 comprising administering a therapeutically effective amount of a compound of formula (I).

Unless otherwise defined, all technical and scientific terms used herein have the same meaning as commonly understood by one of ordinary skill in the art to which this invention belongs. All publications, patent applications, patents, and other references mentioned herein are incorporated by reference in their entirety. In case of conflict, the present specification, including definitions, will control. In addition, the materials, methods,

and examples are illustrative only and not intended

30 The term "alkyl" represents a linear, branched or cyclic hydrocarbon moiety having, for example, 1 to

to be limiting.

10 carbon atoms, which may have one or more double bonds or triple bonds in the chain, and is optionally substituted. For example, suitable substituents include halogen, amino, amidino, amido, azido, cyano, guanido, hydroxyl, nitro, nitroso, urea,  $OS(O)_2R_{21}$  (wherein  $R_{21}$  is selected from  $C_{1-6}$ alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle),  $OS(O)_2OR_{22}$  (wherein  $R_{22}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle),  $S(0)_2OR_{23}$ (wherein  $R_{23}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle),  $S(0)_{0-2}R_{24}$  (wherein  $R_{24}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle), OP(0)OR<sub>25</sub>OR<sub>26</sub>, P(0)OR<sub>25</sub>OR<sub>26</sub> (wherein  $R_{25}$  and  $R_{26}$  are each independently selected from H or  $C_{1-6}$  alkyl),  $C(0)R_{27}$  (wherein  $R_{27}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle), C(O)OR28 (wherein R28 is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl,  $C_{6-12}$  aralkyl or 3 to 10 membered heterocycle),  $NR_{29}C(0)R_{30}$ ,  $C(0)NR_{29}R_{30}$ (wherein  $R_{29}$  is H or  $C_{1-6}$  alkyl and  $R_{30}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl,  $C_{6-12}$  aralkyl or 3 to 10 membered heterocycle, or R29 and R30 are taken together with the atoms to which they are attached to form a 3 to 10 membered heterocycle), SO<sub>2</sub>NR<sub>31</sub>R<sub>32</sub>, 25 NR<sub>31</sub>SO<sub>2</sub>R<sub>32</sub> (wherein R<sub>31</sub> and R<sub>32</sub> are each independently selected from the group consisting of H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl, 3 to 10 membered heterocycle and  $C_{6-12}$ aralkyl),  $C(R_{33})NR_{34}$  or  $C(R_{33})NOR_{34}$  (wherein  $R_{33}$  and  $R_{34}$ are each independently selected from the group 30 consisting of H,  $C_{1-6}$  alkyl, or  $C_{6-12}$  aryl).

Preferred substituents for the alkyl groups include halogen (Br, Cl, I or F), cyano, nitro, oxo, amino, COOH, COO- $C_{1-4}$  alkyl, CO- $C_{1-4}$  alkyl, and phenyl.

- 5 Examples of alkyl groups include but are not limited to methyl, ethyl, propyl, isopropyl, butyl, isobutyl, sec-butyl, tert-butyl, pentyl, isopentyl, neopentyl, tert-pentyl, hexyl, isohexyl, neohexyl, allyl, vinyl, acetylenyl, ethylenyl, propenyl,
- isopropenyl butenyl, isobutenyl, hexenyl,
  butadienyl, pentenyl, pentadienyl, hexenyl,
  hexadienyl, hexatrienyl, heptenyl, heptadienyl,
  heptatrienyl, octenyl, octadienyl, octatrienyl,
  octatetraenyl, propynyl, butynyl, pentynyl, hexynyl,
- 15 cyclopropyl, cyclobutyl, cycloheptyl, cyclohexenyl, cyclohex-dienyl and cyclohexyl.

The term alkyl is also meant to include alkyls in which one or more hydrogen atom is replaced by a lalogen, i.e. an alkylhalide. Examples include but are not limited to trifluoromethyl, difluoromethyl, fluoromethyl, trichloromethyl, dichloromethyl, chloromethyl, trifluoroethyl, difluoroethyl, fluoroethyl, trichloroethyl, dichloroethyl, fluoroethyl, trichloroethyl, dichloroethyl,

25 chloroethyl, chlorofluoromethyl, chlorodifluoromethyl, dichlorofluoroethyl.

The term "alkenyl" refers to alkyl groups may have one or more double bonds in the chain. The term

30 "alkynyl" refers to alkyl groups may have one or more triple bonds in their chain. The alkenyl and

alkynyl groups can be optionally substituted as described above for the alkyl groups.

The term "alkoxy" represents an alkyl which is

5 covalently bonded to the adjacent atom through an oxygen atom. Examples include but are not limited to methoxy, ethoxy, propoxy, isopropoxy, butoxy, isobutoxy, sec-butoxy, tert-butoxy, pentyloxy, isopentyloxy, neopentyloxy, tert-pentyloxy,

10 hexyloxy, isohexyloxy and neohexyloxy.

The term "alkylamino" represents an alkyl which is covalently bonded to the adjacent atom through a nitrogen atom and may be monoalkylamino or

15 dialkylamino, wherein the alkyl groups may be the same or different. Examples include but are not limited to methylamino, dimethylamino, ethylamino, diethylamino, methylethylamino, propylamino, isopropylamino, butylamino, isobutylamino, sectoutylamino, tert-butylamino, pentylamino, isopentylamino, neopentylamino, tert-pentylamino, hexylamino, isohexylamino and neohexylamino.

The term "alkyloxycarbonyl" represents an alkyloxy
which is covalently bonded to the adjacent atom
through carbonyl (C=O). Examples include but are not
limited to methoxycarbonyl, ethoxycarbonyl,
propoxycarbonyl, isopropoxycarbonyl, butoxycarbonyl,
isobutoxycarbonyl, sec-butoxycarbonyl, tertbutoxycarbonyl, pentyloxycarbonyl,
isopentyloxycarbonyl, neopentyloxycarbonyl, tert-

pentyloxycarbonyl, hexyloxycarbonyl, isohexyloxycarbonyl and neohexyloxycarbonyl.

The term "amidino" represents  $-C (=NR_{10}) NR_{11}R_{12}$ , wherein  $R_{10}$ ,  $R_{11}$  and  $R_{12}$  are each independently selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or  $C_{6-12}$  aralkyl, or  $R_{11}$  and  $R_{12}$  are taken together with the nitrogen to which they are attached to form a 3 to 10 membered heterocycle.

10

The term "amido" represents  $-\text{CONH}_2$ ,  $-\text{CONHR}_{13}$  and  $-\text{CONR}_{13}\text{R}_{14}$  wherein  $\text{R}_{13}$  and  $\text{R}_{14}$  are each independently selected from  $\text{C}_{1-6}$  alkyl,  $\text{C}_{6-12}$  aryl, 3 to 10 membered heterocycle or  $\text{C}_{6-12}$  aralkyl, or  $\text{R}_{13}$  and  $\text{R}_{14}$  are taken together with the nitrogen to which they are attached to form a 3 to 10 membered heterocycle.

The term "amino" represents a derivative of ammonia obtained by substituting one or more hydrogen atom and include  $-NH_2$ ,  $-NHR_{15}$  and  $-NR_{15}R_{16}$ , wherein  $R_{15}$  and  $R_{16}$  are each independently selected from  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or  $C_{6-12}$  aralkyl, or  $R_{15}$  and  $R_{16}$  are taken together with the nitrogen to which they are attached to form a 3 to 10 membered heterocycle.

25

The term "aryl" represents a carbocyclic moiety containing at least one benzenoid-type ring (i.e. the aryl group may be monocyclic or polycyclic), and which is optionally substituted with one or more substituents. For example, suitable substituents include halogen, halogenated C<sub>1-6</sub> alkyl, halogenated

C<sub>1-6</sub> alkoxy, amino, amidino, amido, azido, cyano, guanido, hydroxyl, nitro, nitroso, urea, OS(O)<sub>2</sub>R<sub>21</sub> (wherein  $R_{21}$  is selected from  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle), OS(O)2OR22 (wherein R22 5 is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle), S(O)<sub>2</sub>OR<sub>23</sub> (wherein R<sub>23</sub> is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle),  $S(0)_{0-2}R_{24}$  (wherein  $R_{24}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 10 membered heterocycle), OP(O)OR<sub>25</sub>OR<sub>26</sub>, P(O)OR<sub>25</sub>OR<sub>26</sub> (wherein  $R_{25}$  and  $R_{26}$  are each independently selected from H or  $C_{1-6}$  alkyl),  $C_{1-6}$ alkyl,  $C_{6-12}$ aralkyl,  $C_{1-6}$  $_{6}$ alkoxy,  $C_{6-12}$ aralkyloxy,  $C_{6-12}$ aryloxy, 3 to 10 membered heterocycle,  $C(0)R_{27}$  (wherein  $R_{27}$  is 15 selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle),  $C(0)OR_{28}$  (wherein  $R_{28}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl,  $C_{6-12}$  aralkyl or 3 to 10 membered heterocycle),  $NR_{29}C(0)R_{30}$ ,  $C(0)NR_{29}R_{30}$ (wherein  $R_{29}$  is H or  $C_{1-6}$  alkyl and  $R_{30}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl,  $C_{6-12}$  aralkyl or 3 to 10 membered heterocycle, or  $R_{29}$  and  $R_{30}$  are taken together with the atoms to which they are attached to form a 3 to 10 membered heterocycle), SO<sub>2</sub>NR<sub>31</sub>R<sub>32</sub>,  $NR_{31}SO_2R_{32}$  (wherein  $R_{31}$  and  $R_{32}$  are each independently 25 selected from the group consisting of H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl, 3 to 10 membered heterocycle and  $C_{6-12}$ aralkyl),  $C(R_{33})NR_{34}$  or  $C(R_{33})NOR_{34}$  (wherein  $R_{33}$  and  $R_{34}$ are each independently selected from the group consisting of H,  $C_{1-6}$  alkyl, or  $C_{6-12}$  aryl).

Preferred substituents for the aryl groups include halogen (Br, Cl, I or F), cyano, nitro, oxo, amino, C<sub>1-4</sub> alkyl (e.g., CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, isopropyl), C<sub>1-4</sub> alkoxy (e.g., OCH<sub>3</sub>, OC<sub>2</sub>H<sub>5</sub>), halogenated C<sub>1-4</sub> alkyl (e.g., CF<sub>3</sub>, CHF<sub>2</sub>), halogenated C<sub>1-4</sub> alkoxy (e.g., OCF<sub>3</sub>, OC<sub>2</sub>F<sub>5</sub>), COOH, COO-C<sub>1-4</sub> alkyl, CO-C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkyl-

S- (e.g.,  $CH_3S$ ,  $C_2H_5S$ ), halogenated  $C_{1-4}$  alkyl-S- (e.g.,  $CF_3S$ ,  $C_2F_5S$ ), benzyloxy, and pyrazolyl.

- 10 Examples of aryl include but are not limited to phenyl, tolyl, dimethylphenyl, aminophenyl, anilinyl, naphthyl, anthryl, phenanthryl or biphenyl.
- 15 The term "aralkyl" represents an aryl group attached to the adjacent atom by a C<sub>1-6</sub>alkyl. Examples include but are not limited to benzyl, benzhydryl, trityl, phenethyl, 3-phenylpropyl, 2-phenylpropyl, 4-phenylbutyl and naphthylmethyl. The aryl and alkyl portions can be optionally substituted as described above.

The term "aralkyloxy" represents an aralkyl which is covalently bonded to the adjacent atom through an oxygen atom. Examples include but are not limited to benzyloxy, benzhydryloxy, trityloxy, phenethyloxy, 3-phenylpropyloxy, 2-phenylpropyloxy, 4-phenylbutyloxy and naphthylmethoxy. The aryl and alkyl portions can be optionally substituted as described above.

The term "aryloxy" represents an aryl which is covalently bonded to the adjacent atom through an oxygen atom. Examples include but are not limited to phenoxy and naphthyloxy. The aryl portion can be optionally substituted as described above.

The term "guanidino" represents  $-NR_{17}C$  (= $NR_{18}$ )  $NR_{19}R_{20}$  wherein  $R_{17}$ ,  $R_{18}$ ,  $R_{19}$  and  $R_{20}$  are each independently selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or  $C_{6-12}$  10 aralkyl, or  $R_{19}$  and  $R_{20}$  are taken together with the nitrogen to which they are attached to form a 3 to 10 membered heterocycle.

The term "halogen" is specifically a fluoride atom, chloride atom, bromide atom or iodide atom.

The term "heterocycle" represents an optionally substituted saturated, unsaturated or aromatic cyclic moiety wherein said cyclic moiety is

- interrupted by at least one heteroatom selected from oxygen (O), sulfur (S) or nitrogen (N). Heterocycles may be monocyclic or polycyclic rings. For example, suitable substituents include halogen, halogenated  $C_{1-6}$  alkyl, halogenated  $C_{1-6}$  alkyl, halogenated  $C_{1-6}$  alkoxy, amino, amidino,
- amido, azido, cyano, guanido, hydroxyl, nitro, nitroso, urea,  $OS(O)_2R_{21}$  (wherein  $R_{21}$  is selected from  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle),  $OS(O)_2OR_{22}$  (wherein  $R_{22}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered
- 30 heterocycle),  $S(O)_2OR_{23}$  (wherein  $R_{23}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered

heterocycle),  $S(0)_{0-2}R_{24}$  (wherein  $R_{24}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle),  $OP(O)OR_{25}OR_{26}$ ,  $P(O)OR_{25}OR_{26}$  (wherein  $R_{25}$ and  $R_{26}$  are each independently selected from H or  $C_{1-6}$ 5 alkyl),  $C_{1-6}$ alkyl,  $C_{6-12}$ aralkyl,  $C_{1-6}$ alkoxy,  $C_{6-12}$  aryl,  $C_{6-12}$ aralkyloxy,  $C_{6-12}$ aryloxy,  $C(0)R_{27}$  (wherein  $R_{27}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle),  $C(0)OR_{28}$  (wherein  $R_{28}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl,  $C_{6-12}$  aralkyl or 10 3 to 10 membered heterocycle),  $NR_{29}C(0)R_{30}$ ,  $C(0)NR_{29}R_{30}$ (wherein  $R_{29}$  is H or  $C_{1-6}$  alkyl and  $R_{30}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl,  $C_{6-12}$  aralkyl or 3 to 10 membered heterocycle, or R29 and R30 are taken together with the atoms to which they are attached 15 to form a 3 to 10 membered heterocycle),  $SO_2NR_{31}R_{32}$ ,  $NR_{31}SO_2R_{32}$  (wherein  $R_{31}$  and  $R_{32}$  are each independently selected from the group consisting of H, C<sub>1-6</sub> alkyl,  $C_{6-12}$  aryl, 3 to 10 membered heterocycle and  $C_{6-12}$ aralkyl),  $C(R_{33})NR_{34}$  or  $C(R_{33})NOR_{34}$  (wherein  $R_{33}$  and  $R_{34}$ 20 are each independently selected from the group consisting of H,  $C_{1-6}$  alkyl, or  $C_{6-12}$  aryl).

Preferred substituents for the heterocycle groups include halogen (Br, Cl, I or F), cyano, nitro, oxo, amino, C<sub>1-4</sub> alkyl (e.g., CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, isopropyl), C<sub>1-4</sub> alkoxy (e.g., OCH<sub>3</sub>, OC<sub>2</sub>H<sub>5</sub>), halogenated C<sub>1-4</sub> alkyl (e.g., CF<sub>3</sub>, CHF<sub>2</sub>), halogenated C<sub>1-4</sub> alkoxy (e.g., OCF<sub>3</sub>, OC<sub>2</sub>F<sub>5</sub>), COOH, COO-C<sub>1-4</sub> alkyl, CO-C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkyl-S- (e.g., CH<sub>3</sub>S, C<sub>2</sub>H<sub>5</sub>S), halogenated C<sub>1-4</sub> alkyl-30 S- (e.g., CF<sub>3</sub>S, C<sub>2</sub>F<sub>5</sub>S), benzyloxy, and pyrazolyl.

Examples of heterocycles include but are not limited to azepinyl, aziridinyl, azetyl, azetidinyl, diazepinyl, dithiadiazinyl, dioxazepinyl, dioxolanyl, dithiazolyl, furanyl, isooxazolyl,

- isothiazolyl, imidazolyl, morpholinyl, morpholino, oxetanyl, oxadiazolyl, oxiranyl, oxazinyl, oxazolyl, piperazinyl, pyrazinyl, pyridazinyl, pyrimidinyl, piperidyl, piperidino, pyridyl, pyranyl, pyrazolyl, pyrrolyl, pyrrolidinyl, thiatriazolyl, tetrazolyl,
- thiadiazolyl, triazolyl, thiazolyl, thienyl, tetrazinyl, thiadiazinyl, triazinyl, thiazinyl, thiopyranyl furoisoxazolyl, imidazothiazolyl, thienoisothiazolyl, thienothiazolyl, imidazopyrazolyl, cyclopentapyrazolyl,
- 15 pyrrolopyrrolyl, thienothienyl,
  thiadiazolopyrimidinyl, thiazolothiazinyl,
  thiazolopyrimidinyl, thiazolopyridinyl,
  oxazolopyrimidinyl, oxazolopyridyl, benzoxazolyl,
  benzisothiazolyl, benzothiazolyl, imidazopyrazinyl,
- purinyl, pyrazolopyrimidinyl, imidazopyridinyl, benzimidazolyl, indazolyl, benzoxathiolyl, benzodioxolyl, benzodithiolyl, indolizinyl, indolinyl, isoindolinyl, furopyrimidinyl, furopyridyl, benzofuranyl, isobenzofuranyl,
- 25 thienopyrimidinyl, thienopyridyl, benzothienyl, cyclopentaoxazinyl, cyclopentafuranyl, benzoxazinyl, benzothiazinyl, quinazolinyl, naphthyridinyl, quinolinyl, isoquinolinyl, benzopyranyl, pyridopyridazinyl and pyridopyrimidinyl.

30

The term "heteroaralkyl" represents a heterocycle group attached to the adjacent atom by a  $C_{1-6}$  alkyl. The heterocycle and alkyl portions can be optionally substituted as described above.

5

The term "urea" represents  $-N(R_{35}) \, \text{CONR}_{36} R_{37}$  wherein  $R_{35}$  is H or  $C_{1-6}$  alkyl and wherein  $R_{36}$  and  $R_{37}$  are each independently selected from the group consisting of H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl, 3 to 10 membered heterocycle and  $C_{6-12}$  aralkyl, or  $R_{36}$  and  $R_{37}$  are taken together with the nitrogen to which they are attached to form a 3 to 10 membered heterocycle.

The term "independently" means that a substituent can be the same or a different definition for each item.

The term "optionally substituted" represents one or more halogen, halogenated C<sub>1-6</sub> alkyl, halogenated C<sub>1-6</sub>
20 alkoxy, amino, amidino, amido, azido, cyano, guanido, hydroxyl, nitro, nitroso, urea, OS(O)<sub>2</sub>R<sub>21</sub> (wherein R<sub>21</sub> is selected from C<sub>1-6</sub> alkyl, C<sub>6-12</sub> aryl or 3 to 10 membered heterocycle), OS(O)<sub>2</sub>OR<sub>22</sub> (wherein R<sub>22</sub> is selected from H, C<sub>1-6</sub> alkyl, C<sub>6-12</sub> aryl or 3 to 10 membered heterocycle), S(O)<sub>2</sub>OR<sub>23</sub> (whereir R<sub>23</sub> is selected from H, C<sub>1-6</sub> alkyl, C<sub>6-12</sub> aryl or 3 to 10 membered heterocycle), S(O)<sub>0-2</sub>R<sub>24</sub> (wherein R<sub>24</sub> is selected from H, C<sub>1-6</sub> alkyl, C<sub>6-12</sub> aryl or 3 to 10 membered heterocycle), OP(O)OR<sub>25</sub>OR<sub>26</sub>, P(O)OR<sub>25</sub>OR<sub>26</sub>
30 (wherein R<sub>25</sub> and R<sub>26</sub> are each independently selected from H or C<sub>1-6</sub> alkyl), C<sub>1-6</sub>alkyl, C<sub>6-12</sub>aralkyl, C<sub>6-12</sub>

aryl,  $C_{1-6}$ alkoxy,  $C_{6-12}$ aralkyloxy,  $C_{6-12}$ aryloxy, 3 to 10 membered heterocycle,  $C(0)R_{27}$  (wherein  $R_{27}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle),  $C(0)OR_{28}$  (wherein  $R_{28}$  is 5 selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl,  $C_{6-12}$  aralkyl or 3 to 10 membered heterocycle),  $NR_{29}C(0)R_{30}$ ,  $C(0)NR_{29}R_{30}$ (wherein  $R_{29}$  is H or  $C_{1-6}$  alkyl and  $R_{30}$  is selected from H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl,  $C_{6-12}$  aralkyl or 3 to 10 membered heterocycle, or  $R_{29}$  and  $R_{30}$  are taken 10 together with the atoms to which they are attached to form a 3 to 10 membered heterocycle), SO<sub>2</sub>NR<sub>31</sub>R<sub>32</sub>, NR<sub>31</sub>SO<sub>2</sub>R<sub>32</sub> (wherein R<sub>31</sub> and R<sub>32</sub> are each independently selected from the group consisting of H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl, 3 to 10 membered heterocycle and  $C_{6-12}$ 15 aralkyl),  $C(R_{33})NR_{34}$  or  $C(R_{33})NOR_{34}$  (wherein  $R_{33}$  and  $R_{34}$ are each independently selected from the group consisting of H,  $C_{1-6}$  alkyl, or  $C_{6-12}$  aryl).

There is also provided "enantiomers" and

20 "diastereoisomers" of the present invention. It will
be appreciated that the compounds in accordance with
the present invention can contain one or more chiral
centers. The compounds in accordance with the
present invention may thus exist in the form of two

25 different optical isomers, that is (+) or (-)
enantiomers or in the form of different
diastereomers. All such enantiomers, diastereomers
and mixtures thereof, including racemic or other
ratio mixtures of individual enantiomers and

30 diastereomers, are included within the scope of the
invention. The single diastereomer can be obtained

by methods well known to those of ordinary skill in the art, such as HPLC, crystallization and chromatography. The single enantiomer can be obtained by methods well known to those of ordinary skill in the art, such as chiral HPLC, enzymatic resolution and chiral auxiliary derivatization.

The optical purity is numerically equivalent to the "enantiomeric excess". The term "enantiomeric excess" is defined in percentage (%) value as follows: [mole fraction (major enantiomer) - mole fraction (minor enantiomer)] x 100. An example of enantiomeric excess of 99% represents a ratio of 99.5% of one enantiomer and 0.5% of the opposite enantiomer.

"Oxidation levels": When there is a sulfur atom present, the sulfur atom can be at different oxidation levels, ie. S, SO, or SO<sub>2</sub>. All such oxidation levels are within the scope of the present invention. When there is a nitrogen atom present, the nitrogen atom can be at different oxidation levels, ie. N or NO. All such oxidation levels are within the scope of the present invention.

25

There is also provided "pharmaceutically acceptable hydrates" of the compounds of the present invention. "Hydrates" exist when the compound of the invention incorporates water. The hydrate may contain one or more molecule of water per molecule of compound of the invention. Illustrative non-limiting examples

include monohydrate, dihydrate, trihydrate and tetrahydrate. The hydrate may contain one or more molecule of compound of the invention per molecule of water. An illustrative non-limiting example

5 include semi-hydrate. In one embodiment, the water may be held in the crystal in various ways and thus, the water molecules may occupy lattice positions in the crystal, or they may form bonds with salts of the compounds as described herein. The hydrate must be "acceptable" in the sense of not being deleterious to the recipient thereof. The hydration may be assessed by methods known in the art such as Loss on Drying techniques (LOD) and Karl Fisher titration.

15

There is also provided "pharmaceutically acceptable salts" of the compounds of the present invention. By the term "pharmaceutically acceptable salts" of compounds are meant those derived from

20 pharmaceutically acceptable inorganic and organic acids and bases. Examples of suitable acids include but are not limited to hydrochloric, hydrobromic, sulphuric, nitric, perchloric, fumaric, maleic, phosphoric, glycollic, lactic, salicylic, succinic, toleune-p-sulphonic, tartaric, acetic, trifluoroacetic, citric, methanesulphonic, formic, benzoic, malonic, naphthalene-2-sulphonic and benzenesulphonic acids. Other acids such as oxalic, while not in themselves pharmaceutically acceptable,

30 may be useful as intermediates in obtaining the

compounds of the invention and their pharmaceutically acceptable acid addition salts.

Salts derived from appropriate bases include alkali

metal, alkaline earth metal or ammonium salts. The
salt(s) must be "acceptable" in the sense of not
being deleterious to the recipient thereof. Nonlimiting examples of such salts known by those of
ordinary skill in the art include without limitation
calcium, potassium, sodium, choline,
ethylenediamine, tromethamine, arginine,
glycinelycine, lycine, magnesium and meglumine.

There is also provided a "pharmaceutically 15 acceptable solvates" of the compounds of the present invention. The term "solvate" means that the compound of the invention incorporates one or more pharmaceutically acceptable solvent. The solvate may contain one or more molecule of solvent per molecule 20 of compound of the invention or may contain one or more molecule of compound of the invention per molecule of solvent. In one embodiment, the solvent may be held in the crystal in various ways and thus, the solvent molecule may occupy lattice positions in 25 the crystal, or they may form bonds with salts of the compounds as described herein. The solvate(s) must be "acceptable" in the sense of not being deleterious to the recipient thereof. The solvation may be assessed by methods known in the art such as 30 Loss on Drying techniques (LOD).

Reference hereinafter to a compound according to the invention includes compounds of the general formula (I) and their pharmaceutically acceptable salts, hydrates and solvates.

5

"Polymorphs": It will be appreciated by those skilled in the art that the compounds in accordance with the present invention can exist in several different crystalline forms due to a different 10 arrangement of molecules in the crystal lattice. This may include solvate or hydrate (also known as pseudopolymorphs) and amorphous forms. All such crystalline forms and polymorphs are included within the scope of the invention. The polymorphs may be 15 characterized by methods well known in the art. Examples of analytical procedures that may be used to determine whether polymorphism occurs include: melting point (including hot-stage microscopy), infrared (not in solution), X-ray powder 20 diffraction, thermal analysis methods (e.g. differential scanning calorimetry (DSC), differential thermal analysis (DTA), thermogravimetric analysis (TGA)), Raman spectroscopy, comparative intrinsic dissolution 25 rate, scanning electron microscopy (SEM).

In one aspect, the present invention provides novel compounds including:

- Compound 1 2-(4-bromobenzyl)-8-(3-phenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 2 8-(3-phenylpropyl)-2-(4-trifluoromethyl-benzyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 3 2-(4-chlorobenzyl)-8-(3-phenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 4 2-(4-fluorobenzyl)-8-(3-phenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 5 8-(3-phenyl-propyl)-2-(4-trifluoromethoxy-benzyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 6 2-(4-methylbenzyl)-8-(3-phenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 7 4-[1-oxo-8-(3-phenyl-propyl)-2,8-diaza-spiro[4.5]dec-2-ylmethyl]-benzonitrile hydrochloride
- Compound 8 2-biphenyl-4-ylmethyl-8-(3-phenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 9 2-naphthalen-2-ylmethyl-8-(3-phenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 10 2-(4-bromobenzyl)-8-(3-phenyl-butyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 11 2-(4-bromobenzyl)-8-(3,3-diphenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 12 8-(3,3-diphenyl-propyl)-2-(4trifluoromethoxy-benzyl)-2,8-diazaspiro[4.5]decan-1-one

- Compound 13 2-(4-bromobenzyl)-8-(3,3-diphenyl-propyl)-2,8-diaza-spiro[4.5]decan-3-one hydrochloride
- Compound 14 8-(3,3-diphenyl-propyl)-2-(3-phenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 15 8-(3,3-diphenyl-propyl)-2-pyridin-4-ylmethyl-2,8-diaza-spiro[4.5]decan-1-one dihydrochloride
- Compound 16 8-(3,3-diphenyl-propyl)-2-(4-methoxy-benzyl)-2,8-diaza-spiro[4.5]decan-1-one
- Compound 17 8-(3,3-diphenyl-propyl)-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 18 2-benzothiazol-2-ylmethyl-8-(3,3-diphenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 19 8-(3,3-diphenyl-propyl)-2-(4-methanesulfonyl-benzyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 20 8-(3,3-diphenyl-propyl)-2-(3-phenyl-allyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 21 8-(3,3-diphenyl-propyl)-2-phenethyl-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 22 2-(4-benzyloxy-benzyl)-8-(3,3-diphenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one
- Compound 23 2-benzofuran-2-ylmethyl-8-(3,3-diphenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one
- Compound 24 8-(3,3-diphenyl-propyl)-2-(4-isopropyl-benzyl)-2,8-diaza-spiro[4.5]decan-1-one

- Compound 25 2-(5-chloro-benzo[b]thiophen-3-ylmethyl)-8-(3,3-diphenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one
- Compound 26 8-(3,3-diphenyl-propyl)-2-(4-nitro-benzyl)-2,8-diaza-spiro[4.5]decan-1-one
- Compound 27 2-(4-bromo-benzyl)-8-(3-pyridin-2-yl-propyl)-2,8-diaza-spiro[4.5]decan-1-one
- Compound 28 2-[1-(4-bromophenyl)-ethyl]-8-(3,3-diphenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 29 8-(3,3-diphenyl-propyl)-2-pyridin-3ylmethyl-2,8-diaza-spiro[4.5]decan-1-one dihydrochloride
- Compound 30 N-{4-[8-(3,3-diphenyl-propyl)-1-oxo-2,8-diaza-spiro[4.5]dec-2-ylmethyl]-phenyl}-acetamide hydrochloride
- Compound 31 8-(3,3-diphenyl-propyl)-2-(6trifluoromethyl-pyridin-3-ylmethyl)-2,8diaza-spiro[4.5]decan-1-one dihydrochloride
- Compound 32 4-[8-(3,3-diphenyl-propyl)-1-oxo-2,8-diaza-spiro[4.5]dec-2-ylmethyl]-benzoic acid hydrochloride
- Compound 33 8-(3,3-diphenyl-propyl)-2-pyridin-2ylmethyl-2,8-diaza-spiro[4.5]decan-1-one dihydrochloride
- Compound 34 8-(3,3-diphenyl-propyl)-2-(4-trifluoromethylsulfanyl-benzyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 35 8-(3,3-diphenyl-propyl)-2-(4-methyl-cyclohexylmethyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 36 4-[8-(3,3-diphenyl-propyl)-1-oxo-2,8-diaza-spiro[4.5]dec-2-ylmethyl]-benzoic acid methyl ester hydrochloride

- Compound 37 8-(3,3-diphenyl-propyl)-2-(5trifluoromethyl-furan-2-ylmethyl)-2,8-diazaspiro[4.5]decan-1-one hydrochloride
- Compound 38 8-(3,3-diphenyl-propyl)-2-(4-iodo-benzyl)-2,8-diaza-spiro[4.5]decan-1-one
- Compound 39 2-(4-methanesulfonylbenzyl)-8-(3-phenyl-butyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 40 2-(4-bromobenzyl)-8-[3-hydroxy-3-(2-methoxyphenyl)-3-phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one
- Compound 41 2-(4-bromobenzyl)-8-[3-hydroxy-3-(3-methoxyphenyl)-3-phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one
- Compound 42 2-(4-bromobenzyl)-8-(3-hydroxy-3-phenyl-3-thiophen-2-yl-propyl)-2,8-diaza-spiro[4.5]decan-1-one
- Compound 43 2-(4-bromobenzyl)-8-(3-hydroxy-3-phenyl-butyl)-2,8-diaza-spiro[4.5]decan-1-one
- Compound 44 2-(4-bromobenzyl)-8-[3-(2-methoxyphenyl)-3-phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one
- Compound 45 2-(4-bromobenzyl)-8-[3-(3-chlorophenyl)-3-hydroxy-3-phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one
- Compound 46 2-(4-bromobenzyl)-8-[3-(4-chlorophenyl)-3-hydroxy-3-phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one
- Compound 47 2-(4-bromobenzyl)-8-[3-(3-chlorophenyl)-3-phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one
- Compound 48 2-(4-bromobenzyl)-8-(3-phenyl-3-thiophen-2-yl-propyl)-2,8-diaza-spiro[4.5]decan-1-one

- Compound 49 2-(4-bromobenzyl)-8-[3-(4-chlorophenyl)-3-phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one
- Compound 50 2-(4-Bromobenzyl)-8-(3-hydroxy-3-phenylpropyl)-2,8-diaza-spiro[4.5]decan-1-one
- Compound 51 8-(3-Benzyloxy-3-phenylpropyl)-2-(4-bromobenzyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 52 2-(4-Bromobenzyl)-8-(3-phenoxy-3-phenylpropyl)-2,8-diaza-spiro[4.5]decan-1-one
- Compound 53 {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid tert-butyl ester
- Compound 54 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride
- Compound 55 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2,6-dimethyl-benzamide hydrochloride
- Compound 56 Cyclohexanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 57 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-phenyl-acetamide hydrochloride
- Compound 58 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(2,4,6-trimethyl-phenyl)-acetamide hydrochloride
- Compound 59 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-phenyl-propionamide hydrochloride

- Compound 60 {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-methyl-carbamic acid tert-butyl ester
- Compound 61 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-N-methyl-benzamide hydrochloride
- Compound 62 Cyclohexanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-methyl-amide hydrochloride
- Compound 63 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-N-methyl-2-phenyl-acetamide hydrochloride
- Compound 64 N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-N-methyl-2-(2,4,6-trimethyl-phenyl)-acetamide hydrochloride
- Compound 65 [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-carbamic acid tert-butyl ester
- Compound 66 {3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid tert-butyl ester
- Compound 67 [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chloro-phenyl)-propyl]-carbamic acid tert-butyl ester
- Compound 68 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochlroride
- Compound 69 Cyclopropanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 70 N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 71 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methyl-butyramide hydrochloride

- Compound 72 N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-chloro-benzamide hydrochloride
- Compound 73 N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-methoxy-benzamide hydrochloride
- Compound 74 Pyridine-2-carboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide dihydrochloride
- Compound 75 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-chloro-benzamide hydrochloride
- Compound 76 N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methoxy-benzamide hydrochloride
- Compound 77 N-(3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-nicotinamide dihydrochloride
- Compound 78 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-4-chloro-benzamide hydrochloride
- Compound 79 N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-4-methoxy-benzamide hydrochloride
- Compound 80 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isonicotinamide dihydrochloride
- Compound 81 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3,4-dichloro-benzamide hydrochloride
- Compound 82 N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3,4-dimethoxy-benzamide hydrochloride
- Compound 83 N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(2-chloro-phenyl)-acetamide hydrochloride

1.

- Compound 84 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(2-methoxy-phenyl)-acetamide hydrochloride
- Compound 85 N-(3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3-chloro-phenyl)-acetamide hydrochloride
- Compound 86 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3-methoxy-phenyl)-acetamide hydrochloride
- Compound 87 N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-pyridin-3-yl-acetamide dihydrochloride
- Compound 88 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(4-methoxy-phenyl)-acetamide hydrochloride
- Compound 89 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3,4-dichloro-phenyl)-acetamide hydrochloride
- Compound 90 Tetrahydro-pyran-4-carboxylic acid{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 91 Cyclopentanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 92 Cyclobutanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 93 Cycloheptanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 94 N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclohexyl-acetamide hydrochloride
- Compound 95 N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride

- Compound 96 Cyclopropanecarboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 97 N-{3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 98 N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methyl-butyramide hydrochloride
- Compound 99 2-chloro-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride
- Compound 100 2-methoxy-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride
- Compound 101 Pyridine-2-carboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide dihydrochloride
- Compound 102 3-chloro-N-{3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride
- Compound 103 3-methoxy-N-{3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride
- Compound 104 N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-nicotinamide dihydrochloride
- Compound 105 4-chloro-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride
- Compound 106 4-methoxy-N-{3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride

- Compound 107 N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isonicotinamide dihydrochloride
- Compound 108 (R)-cyclohexanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro [4.5]dec-8-yl]-1-phenyl-propyl}-amide
- Compound 109 3,4-dichloro-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride
- Compound 110 3,4-dimethoxy-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride
- Compound 111 2-(2-chloro-phenyl)-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 112 N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(2-methox-phenyl)-acetamide hydrochloride
- Compound 113 2-(3-chlorophenyl)-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 114 N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3-methoxyphenyl)-acetamide hydrochloride
- Compound 115 N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-pyridin-3-yl-acetamide dihydrochloride
- Compound 116 N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(4-methoxyphenyl)-acetamide hydrochloride
- Compound 117 2-(3,4-dichlorophenyl)-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride

- Compound 118 Tetrahydro-pyran-4-carboxylic acid{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 119 Cyclopentanecarboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 120 Cyclobutanecarboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 121 Cycloheptanecarboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 122 2-cyclohexyl-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 123 (S)-cyclohexanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide
- Compound 124 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopentyl-acetamide hydrochloride
- Compound 125 Furan-2-carboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 126 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-ethyl-butyramide hydrochloride
- Compound 127 Thiophene-2-carboxylic acid {3-[2-(4-brom-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 128 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3,4-dimethoxyphenyl)-acetamide hydrochloride

- Compound 129 2-cyclopentyl-N-(3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 130 Furan-2-carboxylic acid {3-[2-(4-methox-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl)-amide hydrochloride
- Compound 131 2-ethyl-N-(3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-butyramide hydrochloride
- Compound 132 Thiophene-2-carboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 133 2-(3,4-dimethoxy-phenyl)-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 134 Cyclohexanecarboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 135 N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride
- Compound 136 N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-phenyl-acetamide hydrochloride
- Compound 137 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 138 Cyclopropanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl} amide hydrochloride
- Compound 139 N-{3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride

- Compound 140 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methyl-butyramide hydrochloride
- Compound 141 2-chloro-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride
- Compound 142 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-methoxy-benzamde hydrochloride
- Compound 143 Pyridine-2-carboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide dihydrochloride
- Compound 144 3-chloro-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride
- Compound 145 N-(3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methoxy-benzamide hydrochloride
- Compound 146 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-nicotinamide dihydrochloride
- Compound 147 4-chloro-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride
- Compound 148 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-4-methoxy-benzamide hydrochloride
- Compound 149 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isonicotinamide dihydrochloride
- Compound 150 3,4-dichloro-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride

- Compound 151 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3,4-dimethoxy-benzamide hydrochloride
- Compound 152 2-(2-chlorophenyl)-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 153 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(2-methoxyphenyl)-acetamide hydrochloride
- Compound 154 2-(3-chlorophenyl)-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 155 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3-methoxyphenyl)-acetamide hydrochloride
- Compound 156 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride
- Compound 157 (S)-cyclohexanecarboxylic acid [3-(2-benzyl-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide
- Compound 158 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(4-methoxyphenyl)-acetamide hydrochloride
- Compound 159 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-phenyl-acetamide hydrochloride
- Compound 160 2-(3,4-dichlorophenyl)-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 161 Cyclopentanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

- Compound 162 Cyclobutanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 163 Cycloheptanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 164 2-cyclohexyl-N-{3-{2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 165 2-cyclopentyl-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 166 Furan-2-carboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 167 2-ethyl-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl}-1-phenyl-propyl}-butyramide hydrochloride
- Compound 168 Thiophene-2-carboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 169 2-(3,4-dimethoxyphenyl)-N-{3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 170 Cyclohexanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

- Compound 171 4-methyl-cyclohexanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 172 2-methoxy-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide dihydrochloride
- Compound 173 3-chloro-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide dihydrochloride
- Compound 174 4-chloro-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide dihydrochloride
- Compound 175 4-methoxy-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide dihydrochloride
- Compound 176 Cyclohexanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chloro-phenyl)-propyl]-amide hydrochloride
- Compound 177 N-[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-benzamide hydrochloride
- Compound 178 N-[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-2-phenyl-acetamide hydrochloride
- Compound 179 {1-(3-chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester
- Compound 180 {1-(3,4-dichlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8 diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester
- Compound 181 N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide dihydrochloride

- Compound 182 Cyclopropanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride
- Compound 183 N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-isobutyramide dihydrochloride
- Compound 184 3-methyl-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-butyramide dihydrochloride
- Compound 185 2-chloro-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide dihydrochloride
- Compound 186 Pyridine-2-carboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide trihydrochloride
- Compound 187 3-methoxy-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide dihydrochloride
- Compound 188 N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-nicotinamide trihydrochloride
- Compound 189 N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-isonicotinamide trihydrochloride
- Compound 190 3,4-dichloro-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide dihydrochloride
- Compound 191 3,4-dimethoxy-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide dihydrochloride
- Compound 192 2-(2-chlorophenyl)-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide dihydrochloride
- Compound 193 2-(2-methoxyphenyl)-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide dihydrochloride

- Compound 194 N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide dihydrochloride
- Compound 195 2-(3-chloro-phenyl)-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide dihydrochloride
- Compound 196 2-(3-methoxyphenyl)-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide dihydrochloride
- Compound 197 2-(4-methoxyphenyl)-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide dihydrochloride
- Compound 198 N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-2-phenyl-acetamide dihydrochloride
- Compound 199 2-(3,4-dichloro-phenyl)-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide dihydrochloride
- Compound 200 Cyclopentanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride
- Compound 201 {1-(3-chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester
- Compound 202 Cyclobutanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride
- Compound 203 Cycloheptanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride
- Compound 204 2-cyclohexyl-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide dihydrochloride

- Compound 205 2-cyclopentyl-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide dihydrochloride
- Compound 206 Furan-2-carboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride
- Compound 207 2-ethyl-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-butyramide dihydrochloride
- Compound 208 Thiophene-2-carboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride
- Compound 209 2-(3,4-dimethoxyphenyl)-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide dihydrochloride
- Compound 210 Cyclohexanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride
- Compound 211 4-methyl-cyclohexanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride
- Compound 212 [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-methoxyphenyl)-propyl]-carbamic acid tert-butyl ester
- Compound 213 [3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-methoxyphenyl)-propyl]-carbamic acid tert-butyl ester
- Compound 214  $(S)-N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl\}-acetamide hydrochloride$
- Compound 215 (S)-cyclopropanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

- Compound 216 (S)-N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 217 (S)-N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methyl-butyramide hydrochloride
- Compound 218 (S)-cyclopentanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 219 (S)-cyclobutanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 220 [3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxyphenyl)-propyl]-carbamic acid tert-butyl ester
- Compound 221 {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-carbamic acid tert-butyl ester
- Compound 222 {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-carbamic acid tert-butyl ester
- Compound 223 {1-(3,4-dichlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester
- Compound 224 2-cyclopropyl-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 225 2-cyclopropyl-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 226 [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxyphenyl)-propyl]-carbamic acid tert-butyl ester

- Compound 227 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-acetamide hydrochloride
- Compound 228 [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3,4-dimethoxyphenyl)-propyl]-carbamic acid tert-butyl ester
- Compound 229 {1-(3,4-dimethoxyphenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl}-propyl}-carbamic acid tert-butyl ester
- Compound 230 Tetrahydro-pyran-4-carboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 231 [3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-methoxy-phenyl)-propyl]-carbamic acid tertbutyl ester
- Compound 232 (S)-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid tert-butyl ester
- Compound 233 {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-carbamic acid tert-butyl ester
- Compound 234 {1-(3,4-dimethoxyphenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester
- Compound 235 {1-(4-chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester
- Compound 236 {1-(2-chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester
- Compound 237 {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid tert-butyl ester

- Compound 238 [3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxyphenyl)-propyl]-carbamic acid tert-butyl ester
- Compound 239 [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-chlorophenyl)-propyl]-carbamic acid tert-butyl ester
- Compound 240 [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-chlorophenyl)-propyl]-carbamic acid tert-butyl ester
- Compound 241 {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid tert-butyl ester
- Compound 242 {1-(4-chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester
- Compound 243 {1-(2-chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester
- Compound 244 {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid tert-butyl ester
- Compound 245 (S)-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide
- Compound 246 [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxyphenyl)-propyl]-carbamic acid tert-butyl ester
- Compound 247 [3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-carbamic acid tert-butyl ester
- Compound 248 [1-(2-chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid tert-butyl ester

- Compound 249 [1-(3-chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid tert-butyl ester
- Compound 250 [1-(3,4-dichlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid tert-butyl ester
- Compound 251 [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-carbamic acid tert-butyl ester
- Compound 252 (S)-8-[3-(cyclopropanecarbonyl-amino)-3-phenyl-propyl]-2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]decanehydrochloride
- Compound 253 (S)-8-[3-(cyclopentanecarbonyl-amino)-3-phenyl-propyl]-2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]decanehydrochloride
- Compound 254 (S)-8-[3-(cyclohexanecarbonyl-amino)-3-phenyl-propyl]-2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]decanehydrochloride
- Compound 255 (S)-8-[3-(cyclopropanecarbonyl-amino)-3-phenyl-propyl]-2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane hydrochloride
- Compound 256 (S)-8-(3-isobutyrylamino-3-phenyl-propyl)-2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane hydrochloride
- Compound 257 (S)-8-[3-(cyclopentanecarbonyl-amino)-3-phenyl-propyl]-2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane hydrochloride
- Compound 258 (S)-8-[3-(cyclohexanecarbonyl-amino)-3-phenyl-propyl]-2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane hydrochloride
- Compound 259 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-isobutyramide hydrochloride

- Compound 260 Cyclobutanecarboxylic acid (3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride
- Compound 261 Cyclopentanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride
- Compound 262 N-[3-[2-(4-bromo-enzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-propionamide hydrochloride
- Compound 263 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-2-methoxy-acetamide hydrochloride
- Compound 264 Cyclohexanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl)-amide hydrochloride
- Compound 265 Cyclopropanecarboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride
- Compound 266 N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-isobutyramide hydrochloride
- Compound 267 [3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxyphenyl)-propyl]-carbamic acid tert-butyl ester
- Compound 268 Cyclobutanecarboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride
- Compound 269 Cyclopentanecarboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride

*\$* .

- Compound 270 N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-propionamide hydrochloride
- Compound 271 2-methoxy-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-acetamide hydrochloride
- Compound 272 Cyclohexanecarboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride
- Compound 273 Cyclopropane carboxylic acid(3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride
- Compound 274 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-isobutyramide hydrochloride
- Compound 275 Cyclobutanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride
- Compound 276 Cyclopentanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride
- Compound 277 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-propionamide hydrochloride
- Compound 278 N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-2-methoxy-acetamide hydrochloride
- Compound 279 Cyclohexanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride
- Compound 280 Cyclohexanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-amide

## dihydrochloride

- Compound 281 N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-isobutyramide dihydrochloride
- Compound 282 Cyclobutanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-amide dihydrochloride
- Compound 283 Cyclopentanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-amide dihydrochloride
- Compound 284 N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-propionamide dihydrochloride
- Compound 285 Cyclohexanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-amide dihydrochloride
- Compound 286 Cyclopropanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-amide hydrochloride
- Compound 287 N-[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-isobutyramide hydrochloride
- Compound 288 Cyclobutanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl) propyl]-amide hydrochloride
- Compound 289 Cyclopentanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-amide hydrochloride

- Compound 290 N-[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-propionamide hydrochloride
- Compound 291 N-[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-2-methoxy-acetamide hydrochloride
- Compound 292 2-Cyclopropyl-N-{(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 293 2-Cyclopropyl-N- $\{(S)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride$
- Compound 294 Cyclopentanecarboxylic acid [(S)-3-(2-benzyl-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide hydrochloride
- Compound 295 Cyclopropanecarboxylic acid [(S)-3-(2-benzyl-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide hydrochloride
- Compound 296 Cyclohexanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-amide hydrochloride
- Compound 297 Cyclopropanecarboxylic acid {1-(3-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 298 N-{1-(3-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride
- Compound 299 Cyclobutanecarboxylic acid {1-(3-chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride

- Compound 300 Cyclopentanecarboxylic acid {1-(3-chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 301 N-{1-(3-Chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-propionamide hydrochloride
- Compound 302 N-{1-(3-Chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2-methoxy-acetamide hydrochloride
- Compound 303 Cyclohexanecarboxylic acid {1-(3-chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 304 Cyclopropanecarboxylic acid {1-(3-chlorophenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 305 N-{1-(3-Chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride
- Compound 306 Cyclobutanecarboxylic acid {1-(3-chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 307 Cyclopentanecarboxylic acid {1-(3-chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride

- Compound 308 N-{1-(3-Chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-propionamide hydrochloride
- Compound 309 N-{1-(3-Chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl}-propyl}-2-methoxy-acetamide hydrochloride
- Compound 310 Cyclopropanecarboxylic acid [1-(3-chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 311 N-[1-(3-Chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-isobutyramide dihydrochloride
- Compound 312 Cyclobutanecarboxylic acid [1-(3-chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 313 Cyclopentanecarboxylic acid [1-(3-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 314 N-[1-(3-Chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-propionamide dihydrochloride
- Compound 315 N-[1-(3-Chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-2-methoxy-acetamide dihydrochloride
- Compound 316 Cyclohexanecarboxylic acid [1-(3-chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 317 Cyclopropanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-2-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride

- Compound 318 Cyclopentanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-2-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride
- Compound 319 Cyclopropanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride
- Compound 320 Cyclopentanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride
- Compound 321 Cyclopropanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-4-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride
- Compound 322 Cyclopentanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-4-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride
- Compound 323 Cyclopropanecarboxylic acid {(S)-3-[1-oxo-2-(1-oxy-pyridin-2-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 324 Cyclopentanecarboxylic acid {(S)-3-[1-oxo-2-(1-oxy-pyridin-2-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 325 Cyclopropanecarboxylic acid {(S)-3-[1-oxo-2-(1-oxy-pyridin-3-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 326 Cyclopentanecarboxylic acid ((S)-3-[1-oxo-2-(1-oxy-pyridin-3-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 327 Cyclopropanecarboxylic acid {(S)-3-[1-oxo-2-(1-oxy-pyridin-4-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

- Compound 328 Cyclopentanecarboxylic acid {(S)-3-[1-0x0-2-(1-0xy-pyridin-4-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 329 Cyclopentanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride
- Compound 330 N-{3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-propionamide dihydrochloride
- Compound 331 N-(3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-2-methoxy-acetamide dihydrochloride
- Compound 332 Cyclopropanecarboxylic acid {3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride
- Compound 333 N-{3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-isobutyramide dihydrochloride
- Compound 334 Cyclobutanecarboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride
- Compound 335 Cyclopentanecarboxylic acid {3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride
- Compound 336 N-{3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-propionamide dihydrochloride
- Compound 337 2-Methoxy-N-{3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-acetamide dihydrochloride
- Compound 338 Cyclopropanecarboxylic acid {3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride

- Compound 339 N-{3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-isobutyramide dihydrochloride
- Compound 340 Cyclobutanecarboxylic acid {3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride
- Compound 341 Cyclopropanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride
- Compound 342 N-{3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-isobutyramide dihydrochloride
- Compound 343 Cyclobutanecarboxylic acid {3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride
- Compound 344 Cyclopentanecarboxylic acid {3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride
- Compound 345 N-{3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-propionamide dihydrochloride
- Compound 346 N-{(S)-3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-nicotinamide
- Compound 347 (R)-Tetrahydro-furan-2-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide
- Compound 348 (S)-Tetrahydro-furan-2-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide
- Compound 349 Tetrahydro-furan-3-carboxylic acid {(S)-3- [2-(4-methanesulfonyl-benzyl)-1-oxo-2,8- diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}- amide

- Compound 350 (R)-N-{(S)-3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-phenyl-propionamide
- Compound 351 3-Oxo-cyclopentanecarboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide
- Compound 352 (S)-N-{(S)-3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-phenyl-propionamide
- Compound 353 (R)-N-[(S)-3-(1-Oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-2-phenyl-propionamide
- Compound 354 (S)-N-[(S)-3-(1-0xo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-2-phenyl-propionamide
- Compound 355 (R)-Tetrahydro-furan-2-carboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide
- Compound 356 (S)-Tetrahydro-furan-2-carboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide
- Compound 357 Tetrahydro-furan-3-carboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide
- Compound 358 3-Oxo-cyclopentanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide
- Compound 359 N-[(S)-3-(1-0xo-2-pyridin-2-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-isobutyramide
- Compound 360 N-[(S)-3-(1-0xo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-isobutyramide

- Compound 361 N-[(S)-3-(1-0xo-2-pyridin-4-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-isobutyramide
- Compound 362 N-{(S)-3-[1-0xo-2-(1-oxy-pyridin-4-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide
- Compound 363 N-{(S)-3-[1-0xo-2-(1-oxy-pyridin-2-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide
- Compound 364 N-{(S)-3-[1-0xo-2-(1-oxy-pyridin-3-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl}-1-phenyl-propyl}-isobutyramide
- Compound 365 1-Methyl-cyclopentanecarboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide
- Compound 366 1-Methyl-cyclohexanecarboxylic acid{(S)-3- [2-(4-methanesulfonyl-benzyl)-1-oxo-2,8- diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}- amide
- Compound 367 2-Cyclopentyl-N-{(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-propionamide
- Compound 368 2-Cyclopentyl-N-{(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-propionamide
- Compound 369 1-Methyl-cyclopentanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethy-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide
- Compound 370 1-Methyl-cyclohexanecarboxylic acid[(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide
- Compound 371 2-Cyclopentyl-N-[(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-propionamide

- Compound 372 2-Cyclopentyl-N-[(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-propionamide
- Compound 373 Cyclopropanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 374 N-[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-isobutyramide hydrochloride
- Compound 375 Cyclobutanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 376 Tetrahydro-pyran-2-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide
- Compound 377 N-{3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-2,2-dimethyl-propionamide hydrochloride
- Compound 378 N-{3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-2,2-dimethyl-propionamide hydrochloride
- Compound 379 N-{1-(3-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2,2-dimethyl-propionamide hydrochloride
- Compound 380 N-{1-(3-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2,2-dimethyl-propionamide hydrochloride
- Compound 381 N-[1-(3-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-2,2-dimethyl-propionamide dihydrochloride
- Compound 382 N-{1-(2-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2,2-dimethyl-propionamide hydrochloride

- Compound 383 N-{1-(4-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2,2-dimethyl-propionamide hydrochloride
- Compound 384 1-Methyl-cyclopropanecarboxylic acid {3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride
- Compound 385 1-Methyl-cyclopropanecarboxylic acid {3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride
- Compound 386 1-Methyl-cyclopropanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-amide dihydrochloride
- Compound 387 1-Methyl-cyclopropanecarboxylic acid {1-(3-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 388 1-Methyl-cyclopropanecarboxylic acid {1-(3-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 389 1-Methyl-cyclopropanecarboxylic acid [1-(3-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 390 1-Methyl-cyclopropanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride

- Compound 391 1-Methyl-cyclopropanecarboxylic acid {1-(4-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 392 Tetrahydro-pyran-2-carboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide
- Compound 393 Cyclopentanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 394 N-[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-propionamide hydrochloride
- Compound 395 N-[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-2-methoxy-acetamide hydrochloride
- Compound 396 N-[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-2-cyclopropyl-acetamide hydrochloride
- Compound 397 Cyclohexanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 398 Cyclopropanecarboxylic acid [3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 399 N-[3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-isobutyramide hydrochloride
- Compound 400 Cyclobutanecarboxylic acid [3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride

- Compound 401 Cyclopentanecarboxylic acid [3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 402 N-[3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-propionamide hydrochloride
- Compound 403 2-Methoxy-N-[3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-acetamide hydrochloride
- Compound 404 2-Cyclopropyl-N-[3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-acetamide hydrochloride
- Compound 405 Cyclohexanecarboxylic acid [3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 406 Cyclopropanecarboxylic acid [3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 407 N-[3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-isobutyramide hydrochloride
- Compound 408 Cyclobutanecarboxylic acid [3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 409 Cyclopentanecarboxylic acid [3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 410 N-[3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methcxyphenyl)-propyl]-propionamide hydrochloride
- Compound 411 N-[3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-2-methoxy-acetamide hydrochloride

- Compound 412 2-Cyclopropyl-N-[3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-acetamide hydrochloride
- Compound 413 Cyclopropanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 414 N-[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-isobutyramide hydrochloride
- Compound 415 Cyclobutanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 416 Cyclopentanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 417 N-[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-propionamide hydrochloride
- Compound 418 N-[3-[2-(4-Bromo-benzy1)-1-oxo-2,8-diaza-spiro[4.5]dec-8-y1]-1-(4-methoxy-pheny1)-propy1]-2-methoxy-acetamide hydrochloride
- Compound 419 Cyclopropanecarboxylic acid [3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 420 N-[3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-isobutyramide hydrochloride
- Compound 421 Cyclobutanecarboxylic acid [3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-amide hydrochloride

- Compound 422 Cyclopentanecarboxylic acid [3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 423 N-[3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-propionamide hydrochloride
- Compound 424 Cyclohexanecarboxylic acid [3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride
- Compound 425 Cyclopentanecarboxylic acid [1-(3-methoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 426 N-[1-(3-Methoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-propionamide dihydrochloride
- Compound 427 2-Methoxy-N-[1-(3-methoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-acetamide dihydrochloride
- Compound 428 3-Hydroxy-cyclopentanecarboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide
- Compound 429 3-Hydroxy-cyclopentanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide
- Compound 430 Cyclopropanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride

- Compound 431 N-{1-(2-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride
- Compound 432 Cyclobutanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 433 Cyclopentanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 434 N-{1-(2-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl}-propyl}-propionamide hydrochloride
- Compound 435 N-{1-(2-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2-methoxy-acetamide hydrochloride
- Compound 436 Cyclohexanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 437 Cyclopropanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl}-propyl}-amide hydrochloride
- Compound 438 N-{1-(2-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride
- Compound 439 Cyclobutanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 440 Cyclopentanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride

- Compound 441 N-{1-(2-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-propionamide hydrochloride
- Compound 442 N-{1-(2-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2-methoxy-acetamide hydrochloride
- Compound 443 Cyclohexanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 444 Cyclopropanecarboxylic acid [1-(2-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 445 N-[1-(2-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-isobutyramide dihydrochloride
- Compound 446 Cyclobutanecarboxylic acid [1-(2-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 447 Cyclopentanecarboxylic acid [1-(2-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 448 N-[1-(2-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-propionamide dihydrochloride
- Compound 449 N-[1-(2-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-2-methoxy-acetamide dihydrochloride
- Compound 450 Cyclohexanecarboxylic acid [1-(2-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride

- Compound 451 Cyclopropanecarboxylic acid {1-(4-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 452 N-{1-(4-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride
- Compound 453 Cyclobutanecarboxylic acid {1-(4-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl)-amide hydrochloride
- Compound 454 Cyclopentanecarboxylic acid {1-(4-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 455 N-{1-(4-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-propionamide hydrochloride
- Compound 456 N-{1-(4-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2-methoxy-acetamide hydrochloride
- Compound 457 Cyclohexanecarboxylic acid {1-(4-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 458 N-{1-(4-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-propionamide hydrochloride
- Compound 459 N-{1-(4-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2-methoxy-acetamide hydrochloride
- Compound 460 Cyclohexanecarboxylic acid {1-(4-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride

- Compound 461 Cyclopropanecarboxylic acid [1-(4-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 462 N-[1-(4-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-isobutyramide dihydrochloride
- Compound 463 Cyclobutanecarboxylic acid [1-(4-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 464 Cyclopentanecarboxylic acid [1-(4-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 465 N-[1-(4-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-propionamide dihydrochloride
- Compound 466 N-[1-(4-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-2-methoxy-acetamide dihydrochloride
- Compound 467 Cyclohexanecarboxylic acid [1-(4-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 468 Cyclopropanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-chloro-phenyl)-propyl]-amide hydrochloride
- Compound 469 Cyclopropanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-chloro-phenyl)-propyl]-amide hydrochloride
- Compound 470 Cyclopropanecarboxylic acid {1-(3,4-dichloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride

- Compound 471 Cyclopropanecarboxylic acid {1-(3,4-dichloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 472 Cyclopropanecarboxylic acid [1-(3,4-dichloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 473 Cyclopentanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-chloro-phenyl)-propyl]-amide hydrochloride
- Compound 474 Cyclopentanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-chloro-phenyl)-propyl]-amide hydrochloride
- Compound 475 Cyclopentanecarboxylic acid {(S)-3-[2-(4-fluoro-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 476 Cyclopentanecarboxylic acid {(S)-3-[2-(4-chloro-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 477 Cyclopentanecarboxylic acid {(S)-3-[2-(4-cyano-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 478 Cyclopentanecarboxylic acid {(S)-3-[2-(4-difluoromethoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 479 Cyclopentanecarboxylic acid {(S)-3-[1-oxo-2-(4-trifluoromethoxy-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

18

- Compound 480 Cyclopentanecarboxylic acid {(S)-3-[2-(4-methylsulfanyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 481 Cyclopentanecarboxylic acid {(S)-3-[1-0x0-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 482 Cyclopentanecarboxylic acid [(S)-3-(2-isobutyl-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide hydrochloride
- Compound 483 Cyclopentanecarboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 484 Cyclopentanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 485 Cyclopropanecarboxylic acid {(S)-3-[2-(4-fluoro-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 486 Cyclopropanecarboxylic acid {(S)-3-[2-(4-chloro-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 487 Cyclopropanecarboxylic acid {(S)-3-[2-(4-cyano-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 488 Cyclopropanecarboxylic acid {(S)-3-[2-(4-difluoromethoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 489 Cyclopropanecarboxylic acid {(S)-3-[1-oxo-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

- Compound 490 Cyclopropanecarboxylic acid [(S)-3-(2-cyclohexylmethyl-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide hydrochloride
- Compound 491 Cyclopropanecarboxylic acid [(S)-3-(2-isobutyl-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide hydrochloride
- Compound 492 Cyclopropanecarboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 493 Cyclopropanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 494 N-[(S)-3-(2-Benzyl-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-isobutyramide hydrochloride
- Compound 495 N-{(S)-3-[2-(4-Fluoro-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 496 Cyclopropanecarboxylic acid {(S)-3-[1-oxo-2-(4-trifluoromethoxy-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 497 Cyclopropanecarboxylic acid {(S)-3-[2-(4-methylsulfanyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 498 N-{(S)-3-[2-(4-Chloro-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 499 N-{(S)-3-[2-(4-Cyano-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 500 N-{(S)-3-[2-(4-Difluoromethoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride

- Compound 501 N-{(S)-3-[1-0xo-2-(4-trifluoromethoxy-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 502 N-{(S)-3-[2-(4-Methylsulfanyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 503 N-{(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 504 2-Methoxy-cyclopent-1-enecarboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide
- Compound 505 2-Methoxy-cyclopent-1-enecarboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide
- Compound 506 Cyclopentanecarboxylic acid {1-(3,4-dichloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 507 Cyclopentanecarboxylic acid {1-(3,4-dichloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 508 Cyclopentanecarboxylic acid [1-(3,4-dichloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride
- Compound 509 N-{(S)-3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-propionamide hydrochloride
- Compound 510 N-{(S)-3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2,2-dimethyl-propionamide hydrochloride

- Compound 511 Thiophene-2-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 512 Thiophene-3-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 513 (R)-Tetrahydro-furan-2-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 514 (S)-Tetrahydro-furan-2-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 515 Tetrahydro-furan-3-carboxylic acid {(S)-3- [2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 516 3-Oxo-cyclopentanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 517 4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 518 Tetrahydro-pyran-4-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 519 4,6-Dimethyl-pyrimidine-5-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-vl]-1-phenyl-propyl}-amide trihydrochloride

- Compound 520 Adamantane-1-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 521 N-{(S)-3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-propionamide hydrochloride
- Compound 522 N-{(S)-3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2,2-dimethyl-propionamide hydrochloride
- Compound 523 Thiophene-2-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 524 Thiophene-3-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 525 4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 526 Tetrahydro-pyran-4-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 527 N-{(S)-3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-nicotinamide dihydrochloride
- Compound 528 Pyrimidine-5-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide trihydrochloride
- Compound 529 4,6-Dimethyl-pyrimidine-5-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide trihydrochloride

- Compound 530 Adamantane-1-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 531 N-{(S)-3-[2-(4-Ethoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 532 Cyclopropanecarboxylic acid {(S)-3-[2-(4-ethoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 533 4,4-Difluoro-cyclohexanecarboxylic acid { (S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 534 2-Cyclopropyl-N-{(S)-3-[2-(4-methanesulfonyl-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 535 4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
  - Compound 536 N-{3-[2-(4-Bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-benzenesulfonamide hydrochloride
  - Compound 537 Propane-2-sulfonic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 538 Propane-2-sulfonic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

- Compound 539 Piperidine-1-carboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 540 Piperidine-1-carboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 541 Piperidine-1-carboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}amide hydrochloride
- Compound 542 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-phenyl-urea hydrochloride
- Compound 543 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(2-chloro-phenyl)-urea hydrochloride
- Compound 544 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(2-methoxy-phenyl)-urea hydrochloride
- Compound 545 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(3-chloro-phenyl)-urea hydrochloride
- Compound 546 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(3-methoxy-phenyl)-urea hydrochloride
- Compound 547 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(4-chloro-phenyl)-urea hydrochloride
- Compound 548 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(4-methoxy-phenyl)-urea hydrochloride
- Compound 549 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(2,6-dimethyl-phenyl)-urea hydrochloride
- Compound 550 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-naphthalen-1-yl-urea hydrochloride

- Compound 551 1-(3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-phenyl-urea hydrochloride
- Compound 552 1-(2-chlorophenyl)-3-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-urea hydrochloride
- Compound 553 1-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(2-methoxyphenyl)-urea hydrochloride
- Compound 554 1-(3-chlorophenyl)-3-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-urea hydrochloride
- Compound 555 1-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(3-methoxyphenyl)-urea hydrochloride
- Compound 556 -{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(4-methoxyphenyl)-urea hydrochloride
- Compound 557 1-(2,6-dimethylphenyl)-3-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-urea hydrochloride
- Compound 558 1-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-naphthalen-1-yl-urea hydrochloride
- Compound 559 1-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-phenyl-urea hydrochloride
- Compound 560 1-(2-chlorophenyl)-3-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-ureahydrochloride
- Compound 561 1-{3-[2-(4-methanesulfonylbenzyl)--oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(2-methoxyphenyl)-urea hydrochloride

Ĺ

- Compound 562 1-(3-chlorophenyl)-3-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-urea hydrochloride
- Compound 563 1-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(3-methoxyphenyl)-urea hydrochloride
- Compound 564 1-(4-chlorophenyl)-3-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-urea hydrochloride
- Compound 565 1-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(4-methoxyphenyl)-urea hydrochloride
- Compound 566 1-(2,6-dimethylphenyl)-3-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-urea hydrochloride
- Compound 567 1-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-naphthalen-1-yl-urea hydrochloride
- Compound 568 Morpholine-4-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 569 Morpholine-4-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 570 3,3-Difluoro-pyrrolidine-1-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 571 3,3-Difluoro-pyrrolidine-1-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

- Compound 572 {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid methyl ester hydrochloride
- Compound 573 {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid ethyl ester hydrochloride
- Compound 574 {3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-carbamic acid cyclohexyl ester
- Compound 575 {(S)-3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl}-1-phenyl-propyl}-carbamic acid cyclohexyl ester
- Compound 576 {(S)-3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid cyclobutyl ester
- Compound 577 {(S)-3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid cyclopentyl ester
- Compound 578 [(S)-3-(1-Oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-carbamic acid cyclobutyl ester
- Compound 579 [(S)-3-(1-0xo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-carbamic acid cyclopentyl ester
- Compound 580 [(S)-3-(1-0xo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-carbamic acid 1-methyl-cyclopentyl ester
- Compound 581 [(S)-3-(1-0xo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-carbamic acid cyclohexyl ester
- Compound 582 {3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid ethyl ester hydrochloride
- Compound 583 {3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid ethyl ester hydrochloride

- Compound 584 [3-(1-0xo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-carbamic acid ethyl ester dihydrochloride
- Compound 585 {1-(2-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid ethyl ester hydrochloride
- Compound 586 {1-(2-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid ethyl ester hydrochloride
- Compound 587 [1-(2-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid ethyl ester dihydrochloride
- Compound 588 [3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chloro-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride
- Compound 589 {1-(3-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid ethyl ester hydrochloride
- Compound 590 {1-(3-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid ethyl ester hydrochloride
- Compound 591 [1-(3-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid ethyl ester dihydrochloride
- Compound 592 {1-(4-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid ethyl ester hydrochloride

- Compound 593 [1-(4-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid ethyl ester dihydrochloride
- Compound 594 {3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid methyl ester hydrochloride
- Compound 595 {3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid methyl ester hydrochloride
- Compound 596 {3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid methyl ester hydrochloride
- Compound 597 [3-(1-0xo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-carbamic acid methyl ester dihydrochloride
- Compound 598 {1-(2-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride
- Compound 599 {1-(2-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride
- Compound 600 [1-(2-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid methyl ester dihydrochloride
  - Compound 601 [3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chloro-phenyl)-propyl]-carbamic acid methyl ester hydrochloride
  - Compound 602 {1-(3-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride

- Compound 603 {3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-carbamic acid ethyl ester hydrochloride
- Compound 604 {3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-carbamic acid ethyl ester dihydrochloride
- Compound 605 [3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride
- Compound 606 [3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride
- Compound 607 [3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride
- Compound 608 [1-(4-Methoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid ethyl ester dihydrochloride
- Compound 609 [3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3,4-dimethoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride
- Compound 610 {1-(3,4-Dimethoxy-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl)-carbamic acid ethyl ester hydrochloride
- Compound 611 {1-(3,4-Dimethoxy-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid ethyl ester hydrochloride
- Compound 612 [1-(3,4-Dimethoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid ethyl ester dihydrochloride

- Compound 613 [3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride
- Compound 614 [3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride
- Compound 615 [3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride
- Compound 616 [1-(3-Methoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid ethyl ester dihydrochloride
- Compound 617 [3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride
- Compound 618 [3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride
- Compound 619 [3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride
- Compound 620 [3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3,4-dimethoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride
- Compound 621 {1-(3,4-Dimethoxy-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride

- Compound 622 {1-(3,4-Dimethoxy-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride
- Compound 623 [1-(3,4-Dimethoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid methyl ester dihydrochloride
- Compound 624 [3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride
- Compound 625 [3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride
- Compound 626 [3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride
- Compound 627 [1-(3-Methoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid methyl ester dihydrochloride
- Compound 628 {1-(3-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride
- Compound 629 [1-(3-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid methyl ester dihydrochloride
- Compound 630 {1-(4-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride

- Compound 631 {1-(4-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride
- Compound 632 [1-(4-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid methyl ester dihydrochloride
- Compound 633 [3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride
- Compound 634 [3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride
- Compound 635 [3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride
- Compound 636 [3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride
- Compound 637 [3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride
- Compound 638 [3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride
- Compound 639 (4-Bromophenyl)-[8-(3,3-diphenylpropyl)-2,8-diaza-spiro[4.5]dec-2-yl]-methanone hydrochloride

- Compound 640 4-[2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-2-phenyl-butyric acid methyl ester
- Compound 641 4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyric acid methyl ester
- Compound 642 4-[2-(4-methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-2-phenyl-butyric acid methyl ester
- Compound 643 4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2,N-diphenyl-butyramide hydrochloride
- Compound 644 N-benzyl-4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride
- Compound 645 2-(4-bromobenzyl)-8-(4-oxo-3-phenyl-4-piperidin-1-yl-butyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 646 4-[2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-N-cyclohexyl-2-phenylbutyramide hydrochloride
- Compound 647 4-[2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-N-cyclohexyl-n-methyl-2phenyl-butyramide hydrochloride
- Compound 648 4-[2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-N-cyclopropyl-2-phenylbutyramide hydrochloride
- Compound 649 4-[2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-N-cyclobutyl-2-phenylbutyramide hydrochloride
- Compound 650 N-cyclohexyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-n-methyl-2-phenyl-butyramide hydrochloride
- Compound 651 N-cyclopropyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride

- Compound 652 N-cyclobutyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride
- Compound 653 4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-N-cyclopentyl-2-phenyl-butyramide hydrochloride
- Compound 654 4-[2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-N-isopropyl-2-phenylbutyramide hydrochloride
- Compound 655 N-benzyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride
- Compound 656 2-(4-methanesulfonylbenzyl)-8-(4-oxo-3-phenyl-4-piperidin-1-yl-butyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 657 N-cyclohexyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride
- Compound 658 N-cyclopentyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride
- Compound 659 N-isopropyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride
- Compound 660 4-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2,N-diphenyl-butyramide hydrochloride
- Compound 661 N-benzyl-4-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride
- Compound 662 2-(4-methoxybenzyl)-8-(4-oxo-3-phenyl-4-piperidin-1-yl-butyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride
- Compound 663 N-cyclohexyl-4-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride

- Compound 664 N-cyclopropyl-4-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride
- Compound 665 N-cyclobutyl-4-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride
- Compound 666 N-cyclopentyl-4-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride
- Compound 667 N-isopropyl-4-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride
- Compound 668 Cyclopropanecarboxylic acid {(S)-1-(3-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 669 Cyclopropanecarboxylic acid {(S)-1-(3-fluoro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 670 Cyclopropanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride
- Compound 671 Cyclopropanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-3-yl-propyl}-amide hydrochloride
- Compound 672 N-{(S)-1-(3-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride
- Compound 673 N-{(S)-1-(3-Fluoro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride

- Compound 674 N-{(S)-3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-isobutyramide hydrochloride
- Compound 675 N-{(S)-3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-3-yl-propyl}-isobutyramide-hydrochloride
- Compound 676 N-{(S)-3-[2-(4-Chloro-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 677 N-{(S)-3-[2-(4-Fluoro-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 678 N-{(S)-3-[2-(4-Cyano-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 679 N-{(S)-3-[2-(4-Ethoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 680 N-{(S)-3-[2-(4-Difluoromethoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 681 N-{(S)-3-[3-0xo-2-(4-trifluoromethoxy-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 682 N-{(S)-3-[3-Oxo-2-(4-trifluoromethyl-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 683 N-{(S)-3-[3-0xo-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride
- Compound 684 Cyclopropanecarboxylic acid {(S)-3-[2-(4-chloro-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 685 Cyclopropanecarboxylic acid {(S)-3-[2-(4-fluoro-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

- Compound 686 Cyclopropanecarboxylic acid {(S)-3-[2-(4-cyano-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 687 Cyclopropanecarboxylic acid {(S)-3-[2-(4-ethoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 688 Cyclopropanecarboxylic acid {(S)-3-[2-(4-difluoromethoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 689 Cyclopropanecarboxylic acid {(S)-3-[2-(4-trifluoromethoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl}-1-phenyl-propyl}-amide hydrochloride
- Compound 690 Cyclopropanecarboxylic acid {(S)-3-[2-(4-trifluoromethyl-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 691 Cyclopropanecarboxylic acid {(S)-3-[3-oxo-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 692 2-Cyclopropy1-N-{(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 693 N-{(S)-3-[2-(4-Chloro-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-acetamide hydrochloride
- Compound 694 N-{(S)-3-[2-(4-Fluoro-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-acetamide hydrochloride
- Compound 695 N-{(S)-3-[2-(4-Cyano-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-acetamide hydrochloride

- Compound 696 N-{(S)-3-[2-(4-Ethoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-acetamide hydrochloride
- Compound 697 N-{(S)-3-[2-(4-Difluoromethoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl)-2-cyclopropyl-acetamide hydrochloride
- Compound 698 N-{(S)-3-[2-(4-Trifluoromethoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-acetamide hydrochloride
- Compound 699 N- $\{(S)-3-[2-(4-Trifluoromethyl-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-acetamide hydrochloride$
- Compound 700 2-Cyclopropyl-N-{(S)-3-[3-oxo-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride
- Compound 701 4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-(4-chloro-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 702 4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-(4-fluoro-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 703 4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-(4-cyano-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 704 4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-(4-ethoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 705 4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[3-oxo-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

- Compound 706 Cyclopropanecarboxylic acid {(S)-1-(3-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 707 Cyclopropanecarboxylic acid {(S)-1-(3-fluoro-phenyl)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride
- Compound 708 Cyclopropanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride
- Compound 709 Cyclopropanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-3-yl-propyl}-amide hydrochloride
- Compound 710 N-{(S)-1-(3-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride
- Compound 711 N-{(S)-1-(3-Fluoro-phenyl)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride
- Compound 712 N-{(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-isobutyramide hydrochloride
- Compound 713 N-{(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-3-yl-propyl}-isobutyramide hydrochloride
- Compound 714 Propane-2-sulfonic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 715 3-{(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-1,1-dimethyl-urea hydrochloride

- Compound 716 Morpholine-4-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 717 3,3-Difluoro-pyrrolidine-1-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride
- Compound 718 {(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid methyl ester hydrochloride
- Compound 719 {(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid ethyl ester hydrochloride

and pharmaceutically acceptable salts, hydrates or solvates thereof. While the compounds are listed above as their hydrochloride salts, this aspect of the invention includes their non-salt forms, as well as pharmaceutically acceptable salts, hydrates and solvates thereof.

It will be appreciated that the amount of a compound of the invention required for use in treatment will vary not only with the particular compound selected but also with the route of administration, the nature of the condition for which treatment is required and the age and condition of the patient and will be ultimately at the discretion of the attendant physician or veterinarian. In general however a suitable dose will be in the range of from about 0.1 to about 750 mg/kg of body weight per day, preferably in the range of 0.5 to 60 mg/kg/day, most preferably in the range of 1 to 20 mg/kg/day.

The desired dose may conveniently be presented in a single dose or as divided dose administered at appropriate intervals, for example as two, three, four or more doses per day.

The compound is conveniently administered in unit dosage form; for example containing 10 to 1500 mg, conveniently 20 to 1000 mg, most conveniently 50 to 700 mg of active ingredient per unit dosage form.

Ideally the active ingredient should be administered to achieve peak plasma concentrations of the active compound of from about 1 to about 75µM, preferably about 2 to 50 µM, most preferably about 3 to about 30 µM. This may be achieved, for example, by the intravenous injection of a 0.1 to 5% solution of the active ingredient, optionally in saline, or orally administered as a bolus containing about 1 to about 500 mg of the active ingredient. Desirable blood levels may be maintained by a continuous infusion to provide about 0.01 to about 5.0 mg/kg/hour or by intermittent infusions containing about 0.4 to about 15 mg/kg of the active ingredient.

25

While it is possible that, for use in therapy, a compound of the invention may be administered as the raw chemical it is preferable to present the active ingredient as a pharmaceutical formulation. The invention thus further provides a pharmaceutical formulation comprising a compound of formula (I) or

a pharmaceutically acceptable derivative thereof together with one or more pharmaceutically acceptable carriers therefor and, optionally, other therapeutic and/or prophylactic ingredients. The carrier(s) must be "acceptable" in the sense of being compatible with the other ingredients of the formulation and not deleterious to the recipient thereof.

- 10 Pharmaceutical formulations include those suitable for oral, rectal, nasal, topical (including buccal and sub-lingual), transdermal, vaginal or parenteral (including intramuscular, sub-cutaneous and intravenous) administration or in a form suitable for administration by inhalation or insufflation. The formulations may, where appropriate, be conveniently presented in discrete dosage units and may be prepared by any of the methods well known in the art of pharmacy. All methods include the step of bringing into association the active compound with liquid carriers or finely divided solid carriers or both and then, if necessary, shaping the product into the desired formulation.
- 25 Pharmaceutical formulation suitable for oral administration may conveniently be presented as discrete units such as capsules, cachets or tablets each containing a predetermined amount of the active ingredient; as a powder or granules; as a solution, 30 a suspension or as an emulsion. The active

30 a suspension or as an emulsion. The active ingredient may also be presented as a bolus, electuary or paste. Tablets and capsules for oral administration may contain conventional excipients such as binding agents, fillers, lubricants, disintegrants, or wetting agents. The tablets may be coated according to methods well known in the art. Oral liquid preparations may be in the form of, for example, aqueous or oily suspensions, solutions, emulsions, syrups or elixirs, or may be presented as a dry product for constitution with water or other suitable vehicle before use. Such liquid preparations may contain conventional additives such as suspending agents, emulsifying agents, non-aqueous vehicles (which may include edible oils), or preservatives.

15

The compounds according to the invention may also be formulated for parenteral administration (e.g. by injection, for example bolus injection or continuous infusion) and may be presented in unit dose form in ampoules, pre-filled syringes, small volume infusion or in multi-dose containers with an added preservative. The compositions may take such forms as suspensions, solutions, or emulsions in oily or aqueous vehicles, and may contain formulatory agents such as suspending, stabilizing and/or dispersing agents. Alternatively, the active ingredient may be in powder form, obtained by aseptic isolation of sterile solid or by lyophilisation from solution, for constitution with a suitable vehicle, e.g.

For topical administration to the epidermis, the compounds according to the invention may be formulated as ointments, creams or lotions, or as a transdermal patch. Such transdermal patches may contain penetration enhancers such as linalool, carvacrol, thymol, citral, menthol and t-anethole. Ointments and creams may, for example, be formulated with an aqueous or oily base with the addition of suitable thickening and/or gelling agents. Lotions may be formulated with an aqueous or oily base and will in general also contain one or more emulsifying agents, stabilizing agents, dispersing agents, suspending agents, thickening agents, or colouring agents.

15

Formulations suitable for topical administration in the mouth include lozenges comprising active ingredient in a flavoured base, usually sucrose and acacia or tragacanth; pastilles comprising the 20 active ingredient in an inert base such as gelatin and glycerin or sucrose and acacia; and mouthwashes comprising the active ingredient in a suitable liquid carrier.

25 Pharmaceutical formulations suitable for rectal administration wherein the carrier is a solid are most preferably presented as unit dose suppositories. Suitable carriers include cocoa butter and other materials commonly used in the art, and the suppositories may be conveniently formed by admixture of the active compound with the softened

or melted carrier(s) followed by chilling and shaping in moulds.

Formulations suitable for vaginal administration may 5 be presented as pessaries, tampons, creams, gels, pastes, foams or sprays containing in addition to the active ingredient such carriers as are known in the art to be appropriate.

10 For intra-nasal administration the compounds of the invention may be used as a liquid spray or dispersible powder or in the form of drops. Drops may be formulated with an aqueous or non-aqueous base also comprising one more dispersing agents,
15 solubilising agents or suspending agents. Liquid sprays are conveniently delivered from pressurized packs.

For administration by inhalation the compounds
according to the invention are conveniently
delivered from an insufflator, nebulizer or a
pressurized pack or other convenient means of
delivering an aerosol spray. Pressurized packs may
comprise a suitable propellant such as
dichlorodifluoromethane, trichlorofluoromethane,
dichlorotetrafluoroethane, carbon dioxide or other
suitable gas. In the case of a pressurized aerosol
the dosage unit may be determined by providing a
valve to deliver a metered amount.

30

Alternatively, for administration by inhalation or insufflation, the compounds according to the invention may take the form of a dry powder composition, for example a powder mix of the

5 compound and a suitable powder base such as lactose or starch. The powder composition may be presented in unit dosage form in, for example, capsules or cartridges or e.g. gelatin or blister packs from which the powder may be administered with the aid of an inhalator or insufflator.

When desired the above described formulations adapted to give sustained release of the active ingredient may be employed.

15

When the compound (I) or a pharmaceutically acceptable salt, hydrate or solvate thereof is used in combination with a second therapeutic active agent, the dose of each compound may be either the same as or different from that when the compound is used alone. Conventional doses and regimens are readily appreciated by those skilled in the art, including doses described in the Physicians'Desk Reference, 56<sup>th</sup> edition, 2002.

25

The present invention is directed to the use of the compounds as modulators of CCR5 chemokine receptor activity. In particular, the compounds of the invention have been found to have activity in binding to the CCR5 receptor in the biological assay, as described in Example 15, generally with an

 $IC_{50}$  value of less than 25  $\mu M$ . The terms "modulator" or "modulation" are meant to include antagonism, agonism, mixed and partial antagonism and agonism.

- 5 Certain compounds of the present invention have also been tested in an assay for HIV activity, as described in Example 15, and generally having an IC50 value of less than 1  $\mu M$ .
- The purity and mass of the following examples were characterized by mass spectra (LC/MS) and or NMR spectra.

The following general schemes and examples are
15 provided to illustrate various embodiments of the
present invention and shall not be considered as
limiting in scope.

The following abbreviations may be used as follows:

20

br broad DCC 1,3-dicyclohexylcarbodiimide DCE 1,2-dichloroethane DCM dichloromethane DIPEA N, N-diisopropylethylamine DMF N, N-dimethylformamide Hal halogen LAH lithium aluminium hydride TFA trifluoroacetic acid 30 THE tetrahydrofuran

The semi-preparative HPLC purification procedures used are described below:

5 Column: Phenomenex Luna  $C_{18}(2)$ , 5 microns, 10 x 250 mm

Buffer A: 3 mM HCl in  $H_2O$  (pH 2.4-2.6)

Buffer B: acetonitrile

- Method A: 15-55% B in 30 min. (1.4%/min)

10 - Method B: 10-60% B in 50 min. (1%/min)

- Method C: 20-50% B in 21 min. (1.4%/min)

- Method D: 10-60% B in 42 min. (1.2%/min)

- Method E: 15-45% B in 21 min. (1.4%/min)

or

Buffer A: H<sub>2</sub>O

Buffer B: acetonitrile

- Method F: 15-55% B in 40 min. (1%/min)

Scheme 1.

20

## Preparation 1

5

2-(4-Bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane-8-carboxylic acid tert-butyl ester

Sodium hydride 600 mg (14.7 mmol) (60% suspension in mineral oil) was added in a 500 mL round bottom flask under nitrogen followed by 20 mL of anhydrous DMF and 2.5 g (9.8 mmol) of 1-oxo-2,8-diaza-

spiro[4.5]decane-8-carboxylic acid tert-butyl ester previously dissolved in 20 mL of anhydrous DMF.

After agitating one hour at room temperature, 2.5 g (9.8 mmol) of 4-bromobenzylbromide diluted in 20 mL of anhydrous DMF were added and the reaction mixture was agitated an additional hour at room temperature.

Then 100 mL of water were added and the solution was extracted with diethyl ether (2 x 150 mL). The combined organic layers were dried ( $Na_2SO_4$ ), filtered and evaporated under reduced pressure to yield 4.63

g 2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]decane-8-carboxylic acid tert-butyl ester as a yellow oil.

<sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ): δ [ppm] 7.51 (d, 2H), 7.12 (d, 2H), 4.31 (s, 2H), 3.8 (br d, 2H), 3.14 (t, 2H), 2.86 (br s, 2H), 1.89 (t, 2H), 1.54 (t x d, 2H), 1.37 (s, 9H), 1.32 (br d, 2H).

## Preparation 2

2-(4-Bromobenzyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride

- 5 To 4.62 g of crude 2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane-8-carboxylic acid tert-butyl ester from preparation 1 was added 50 mL of 4N solution of dioxane/HCl. The reaction mixture was agitated 15 minutes at room temperature and 3.05 g
- 10 (77.8%) of 2-(4-bromobenzyl)-2,8-diazaspiro[4.5]decan-1-one hydrochloride was collected, as a colorless solid by filtration followed by trituration with diethyl ether.

<sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ): δ [ppm] 9.15 (br s, 1H), 8.83 (br s, 1H), 7.51 (d, 2H), 7.14 (d, 2H), 4.31 (s, 2H), 3.24 (br d, 2H), 3.15 (t, 2H), 2.92 (q, 2H), 1.95-1.84 (m, 4H), 1.56 (br d, 2H).

## Preparation 3

20 2-(4-Methylsulfanylbenzyl)-1-oxo-2,8-diazaspiro[4.5]decane-8-carboxylic acid tert-butyl ester

This spiro compound was prepared as described in preparation 1, starting from 7 g (27.5 mmol) of 1
25 oxo-2,8-diaza-spiro[4.5]decane-8-carboxylic acid tert-butyl ester, excepted it was purified by flash

chromatography on silica gel (ethyl acetate/hexanes 0:100 to 20:80) yielding 8.05 g (74.9%) of 2-(4-methylsulfanylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane-8-carboxylic acid tert-butyl ester as a pale yellow solid.

<sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ): δ [ppm] 7.21 (d, 2H), 7.11 (d, 2H), 4.3 (s, 2H), 3.8 (br d, 2H), 3.13 (t, 2H), 2.88 (br s, 2H), 2.43 (s, 3H), 1.89 (t, 2H), 1.54 (t x d, 2H), 1.38 (s, 9H), 1.31 (br d, 2H).

10

# Preparation 4

2-(4-Methanesulfonylbenzyl)-1-oxo-2,8-diazaspiro[4.5]decane-8-carboxylic acid tert-butyl ester

To a solution of 7.73 g (19.8 mmol) of 2-(4-methylsulfanylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane-8-carboxylic acid tert-butyl ester in 100 mL of THF, was added 18.2 g (29.7 mmol) of Oxone® in 100 mL of water. The reaction mixture was agitated overnight at room temperature. An aqueous solution of sodium hydroxide (1N, 100 mL) was added and the solution was extracted with DCM (2 x 200 mL). The combined organic layers were dried (Na<sub>2</sub>SO<sub>4</sub>), filtered and evaporated under reduced pressure to yield 6.62 g (79.1%) of 2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane-8-carboxylic acid tert-butyl ester as a white solid.

¹H NMR (400 MHz, DMSO-d<sub>6</sub>): δ [ppm] 7.81 (d, 2H), 7.37
(d, 2H), 4.41 (s, 2H), 3.76 (br d, 2H), 3.15 (t,
2H), 3.14 (s, 3H), 2.86 (br s, 2H), 1.89 (t, 2H),
1.52 (t x d, 2H), 1.33 (s, 9H), 1.29 (br d, 2H).
5 LC/MS: m/z 423.2 (MH<sup>+</sup>).

## Preparation 5

2-(4-Methanesulfonylbenzyl)-2,8-diazaspiro[4.5]decan-1-one hydrochloride

10

As described in preparation 2, 6.62 g (15.6 mmol) of 2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza- spiro[4.5]decane-8-carboxylic acid tert-butyl ester was deprotected under acidic conditions giving access to 5.25 g (93.7%) of 2-(4-methanesulfonylbenzyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride as a white solid.

<sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ):  $\delta$ [ppm] 9.04 (br s, 1H), 8.74 (br s, 1H), 7.83 (d, 2H), 7.39 (d, 2H), 4.42

20 (s, 2H), 3.21 (br d, 2H), 3.15 (t, 2H), 3.13 (s, 3H), 2.89 (q, 2H), 1.92 (t, 2H), 1.84 (t x d, 2H), 1.55 (br d, 2H).

### Preparation 6

25 2-(4-Bromobenzyl)-3-oxo-2,8-diaza-spiro[4.5]decane-8-carboxylic acid tert-butyl ester

This spiro compound was prepared as described in preparation 1, starting from 300 mg (1.18 mmol) of 3-oxo-2,8-diaza-spiro[4.5]decane-8-carboxylic acid tert-butyl ester which was purified by flash chromatography on silica gel (ethyl acetate/hexanes 0:100 to 60:40) yielding 290 mg (58%) of 2-(4-bromobenzyl)-3-oxo-2,8-diaza-spiro[4.5]decane-8-carboxylic acid tert-butyl ester as a colorless oil.

10 <sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  [ppm] 7.52 (d, 2H), 7.16 (d, 2H), 4.31 (s, 2H), 3.32 (m, 2H), 3.16 (br s, 2H), 3.02 (s, 2H), 2.25 (s, 2H), 1.4 (m, 4H), 1.35 (s, 9H).

### 15 Preparation 7

2-(4-Bromobenzyl)-2,8-diaza-spiro[4.5]decan-3-one hydrochloride

As described in preparation 2, 290 mg (0.68 mmol) of 2-(4-bromobenzyl)-3-oxo-2,8-diaza-spiro[4.5]decane-8-carboxylic acid tert-butyl ester was deprotected under acidic conditions giving to 212 mg (86.6%) of 2-(4-bromobenzyl)-2,8-diaza-spiro[4.5]decan-3-one hydrochloride as a white solid.

25 <sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  [ppm] 8.63 (br s, 2H), 7.52 (d, 2H), 7.17 (d, 2H), 4.32 (s, 2H), 3.07 (s, 2H), 3.00 (m, 4H), 2.33 (s, 2H), 1.65 (m, 4H).

# Example 1. 2-(4-Bromobenzyl)-8-(3,3-diphenyl-propyl)-2,8-diaza-spiro[4.5]decan-3-one hydrochloride (Compound 13)

5

A mixture of 28.7 mg (80 µmol) of 2-(4-bromobenzyl)-2,8-diaza-spiro[4.5]decan-3-one hydrochloride, 24.4 mg (88 µmol) of 3,3-diphenylpropyl bromide and 33.1 mg (240 µmol) of potassium carbonate in 1.5 mL of

anhydrous DMF was heated overnight at 60°C. After cooling to room temperature, 0.5 mL of water was added and the solution was extracted with DCM (2 x 2 mL). The crude material was purified by semipreparative HPLC (method A) yielding 22.6 mg (51%) of Compound 13 as a white solid.

<sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ): δ [ppm] 9.96 (br s, 1H), 7.52 (d, 2H), 7.34-7.25 (m, 8H), 7.19-7.13 (m, 4H), 4.31 (s, 2H), 3.96 (q, 1H), 3.36 (m, 4H), 3.05 (d, 1H), 2.96-2.83 (m, 4H), 2.47 (s, 2H), 2.3 (d, 1H),

LC/MS: m/z 519.0 (MH<sup>+</sup>).

20 1.75 (m, 4H).

Table 1 of compounds illustrates some of the compounds of the present invention that were synthesized using the procedure described in scheme 1.

# Table 1.

Table	<u> </u>		
CPD #	MOLSTRUCTURE	COMPOUND NAME	MOLWT PURITY
1	O N CIH	2-(4-bromobenzyl)-8-(3-phenyl- propyl)-2,8-diaza-spiro[4.5]decan- 1-one hydrochloride	477.871 95.1% (LC/MS)
2	F F	8-(3-phenylpropyl)-2-(4- trifluoromethyl-benzyl)-2,8-diaza- spiro[4.5]decan-1-one hydrochloride	<sup>99+</sup> (LC/MS)
3	CI N CIH	2-(4-chlorobenzyl)-8-(3-phenyl- propyl)-2,8-diaza-spiro[4.5]decan- 1-one hydrochloride	433.42 94.8% (HPLC)
4	N— CIH	2-(4-fluorobenzyl)-8-(3-phenyl- propyl)-2,8-diaza-spiro[4.5]decan- 1-one hydrochloride	416.965 90.5% (HPLC)
5	N CIH	8-(3-phenyl-propyl)-2-(4- trifluoromethoxy-benzyl)-2,8- diaza-spiro[4.5]decan-1-one hydrochloride	482.971 92.2% (HPLC)
6	N CIH	2-(4-methylbenzyl)-8-(3-phenyl- propyl)-2,8-diaza-spiro[4.5]decan- 1-one hydrochloride	413.002 93.7% (HPLC)
	CH3		

4-[1-oxo-8-(3-phenyl-propyl)-2,8diaza-spiro[4.5]dec-2-ylmethyl]benzonitrile hydrochloride

423.985 94.1% (HPLC)

8

2-biphenyl-4-ylmethyl-8-(3-phenylpropyl)-2,8-diaza-spiro[4.5]decan- 475.073 (HPLC) 1-one hydrochloride

9

2-naphthalen-2-ylmethyl-8-(3phenyl-propyl)-2,8-diazaspiro[4.5]decan-1-one hydrochloride

449.035 (HPLC)

10 СІН

2-(4-bromobenzyl)-8-(3-phenyl-2-(4-bromobenzyr)-0-(3-phony. butyl)-2,8-diaza-spiro[4.5]decan-1- 491.898 (HPLC) one hydrochloride

11

2-(4-bromobenzyl)-8-(3,3diphenyl-propyl)-2,8-diazaspiro[4.5]decan-1-one hydrochloride

553.969 (HPLC)

12	F F	8-(3,3-diphenyl-propyl)-2-(4- trifluoromethoxy-benzyl)-2,8- diaza-spiro[4.5]decan-1-one	522.608 100% (LC/MS)
13	Br HCI	2-(4-bromobenzyl)-8-(3,3-diphenyl-propyl)-2,8-diazaspiro[4.5]decan-3-onehydrochloride	553.969 > 95% (LC/MS)
14	N N N N N N N N N N N N N N N N N N N	8-(3,3-diphenyl-propyl)-2-(3-phenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-onehydrochloride	503.126 100% (LC/MS)
15	HO NO	8-(3,3-diphenyl-propyl)-2-pyridin- 4-ylmethyl-2,8-diaza- spiro[4.5]decan-1-one dihydrochloride	512.521 100% (LC/MS)
16	HC.O.	8-(3,3-diphenyl-propyl)-2-(4- methoxy-benzyl)-2,8-diaza- spiro[4.5]decan-1-one	468.637 93% (LC/MS)
17		8-(3,3-diphenyl-propyl)-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-spiro[4.5]decan-1-one	541.135 98% (LC/MS)

# hydrochloride

18	S N N N N N N N N N N N N N N N N N N N	2-benzothiazol-2-ylmethyl-8-(3,3-diphenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride	532.149 93% (LC/MS)
19	O-25 O-45 O-45	8-(3,3-diphenyl-propyl)-2-(4- methanesulfonyl-benzyl)-2,8- diaza-spiro[4.5]decan-1-one hydrochloride	553.163 (LC/MS)
20	HO	8-(3,3-diphenyl-propyl)-2-(3- phenyl-allyl)-2,8-diaza- spiro[4.5]decan-1-one hydrochloride	501.11 98% (LC/MS)
21	HO HO	8-(3,3-diphenyl-propyl)-2- phenethyl-2,8-diaza- spiro[4.5]decan-1-one hydrochloride	489.099 98% (LC/MS)
22		2-(4-benzyloxy-benzyl)-8-(3,3- diphenyl-propyl)-2,8-diaza- spiro[4.5]decan-1-one	544.735 100% (LC/MS)
23		2-benzofuran-2-ylmethyl-8-(3,3-diphenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one	478.633 (LC/MS)
24	MC OH,	8-(3,3-diphenyl-propyl)-2-(4- 132	480.692 100%

isopropyl-benzyl)-2,8-diazaspiro[4.5]decan-1-one

(LC/MS)

2-(5-chloro-benzo[b]thiophen-3-100% 25 ylmethyl)-8-(3,3-diphenyl-propyl)-(LC/MS) 2,8-diaza-spiro[4.5]decan-1-one 8-(3,3-diphenyl-propyl)-2-(4-nitro-26 benzyl)-2,8-diaza-spiro[4.5]decan- 483.609 (LC/MS) 1-one 2-(4-bromo-benzyl)-8-(3-pyridin-2-97% 27 yl-propyl)-2,8-diaza-442.398 (HPLC) spiro[4.5]decan-1-one 2-[1-(4-bromophenyl)-ethyl]-8-(3,3diphenyl-propyl)-2,8-diaza-567.995 (LC/MS) 28 spiro[4.5]decan-1-one hydrochloride 8-(3,3-diphenyl-propyl)-2-pyridin-3-ylmethyl-2,8-diaza-512.521 (LC/MS) 29 spiro[4.5]decan-1-one dihydrochloride N-{4-[8-(3,3-diphenyl-propyl)-1oxo-2,8-diaza-spiro[4.5]dec-2-532.124 (LC/MS) 98+

ylmethyl]-phenyl}-acetamide

8-(3,3-diphenyl-propyl)-2-(6-

trifluoromethyl-pyridin-3-ylmethyl)-2,8-diaza-spiro[4.5]decan-1-one

580.519 (LC/MS)

hydrochloride

133

BNSDOCID: <WO\_\_\_\_2005007656A1\_I\_>

30

31

# dihydrochloride

32	O HCI HCI	4-[8-(3,3-diphenyl-propyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-2- ylmethyl]-benzoic acid hydrochloride	519.081 98+ (LC/MS)
33	N HCI N HCI	8-(3,3-diphenyl-propyl)-2-pyridin- 2-ylmethyl-2,8-diaza- spiro[4.5]decan-1-one dihydrochloride	512.521 98+ (LC/MS)
34	F F S	8-(3,3-diphenyl-propyl)-2-(4- trifluoromethylsulfanyl-benzyl)-2,8- diaza-spiro[4.5]decan-1-one hydrochloride	575.136 90+ (LC/MS)
35	H,C N HCI	8-(3,3-diphenyl-propyl)-2-(4-methyl-cyclohexylmethyl)-2,8-diaza-spiro[4.5]decan-1-onehydrochloride	495.147 98+ (LC/MS)
36	H,C N N N N N N N N N N N N N N N N N N N	4-[8-(3,3-diphenyl-propyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-2- ylmethyl]-benzoic acid methyl ester hydrochloride	533.108 <sup>90.7%</sup> (LC/MS)
37	HCI N- FF-F	8-(3,3-diphenyl-propyl)-2-(5- trifluoromethyl-furan-2-ylmethyl)- 2,8-diaza-spiro[4.5]decan-1-one hydrochloride	533.031 98+ (LC/MS)
38		8-(3,3-diphenyl-propyl)-2-(4-iodo- benzyl)-2,8-diaza-spiro[4.5]decan- 1-one	>95% 564.504 (1H NMR)

2-(4-methanesulfonylbenzyl)-8-(3-phenyl-butyl)-2,8-diazaspiro[4.5]decan-1-one hydrochloride

 $491.092 \frac{98+}{(LC/MS)}$ 

Scheme 2.

5

## Preparation 8

2-(4-Bromobenzyl)-8-(3-oxo-3-phenylpropyl)-2,8-diazaspiro[4.5]decan-1-one

To a stirred solution of 2-(4-bromobenzyl)-2.8-diaza-spiro[4.5] decan-1-one hydrochloride (2.30 g, 6.39 mmol) in DMF (43 mL) was added DIPEA (4.2 mL, 3.80

mmol) followed by 3-chloro-1-phenyl-propan-1-one (1.08 g, 6.39 mmol). The reaction mixture was stirred at room temperature for 18 hours and then a saturated solution of NaHCO $_3$  was added and the mixture was

- s extracted with ethyl acetate (3 x 30 mL). The combined organic extracts were washed with water (3 x 30 mL) and brine (30 mL), dried over  $Na_2SO_4$ , filtered and concentrated. The crude product was purified by flash chromatography on silica gel (0% to 5%
- methanol/DCM) to give 2.53 g (87%) of 2-(4bromobenzyl)-8-(3-oxo-3-phenylpropyl)-2,8-diazaspiro[4.5]decan-1-one.

<sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>): δ [ppm] 7.98-7.95 (m, 2H), 7.59-7.54 (m, 1H), 7.49-7.42 (m, 4H), 7.10-7.07 (m, 2H), 4.39 (s, 2H), 3.21 (t, 2H), 3.14 (t, 2H), 2.93-2.90 (m, 2H), 2.84 (t, 2H), 2.19-2.14 (m, 2H), 2.05-1.98 (m, 2H), 1.90 (t, 2H), 1.44-1.41 (m, 2H).

# Example 2. 2-(4-Bromobenzyl)-8-[3-hydroxy-3-(2-20 methoxyphenyl)-3-phenylpropyl]-2,8-diaza-spiro[4.5]decan-1-one (Compound 40)

To a stirred solution of 2-(4-bromobenzyl)-8-(3-oxo-3-phenylpropyl)-2,8-diaza-spiro[4.5]decan-1-one (157 mg, 0.35 mmol) in THF (3.5 mL) at 0°C was added a 1.0 M solution of 2-methoxyphenylmagnesium bromide

(1.4 mL, 1.4 mmol). The reaction mixture was warmed to room temperature and stirred for 18 hours. Water was added and the mixture was extracted with ethyl acetate (3 x 10 mL). The combined organic extracts 5 were washed with brine (10 mL), dried over Na<sub>2</sub>SO<sub>4</sub>, filtered and concentrated. The crude product was purified by semi-preparative HPLC (method F) to give 133 mg (69%) of Compound 40 as a yellow oil. <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>):  $\delta$  [ppm] 7.90 (d, 1H), 7.52-7.39 (m, 4H), 7.24 (m, 3H), 7.15 (m, 1H), 7.08-7.01 (m, 3H), 6.79 (d, 1H), 4.42-4.33 (m, 2H), 3.48 (s, 2H)3H), 3.11 (t, 2H), 3.05 (m, 1H), 2.78 (m, 1H), 2.64 (m, 1H), 2.50-2.45 (m, 2H), 2.34 (m, 1H), 2.23 (m, 1H)1H), 2.00-1.88 (m, 3H), 1.85 (m, 2H), 1.45-1.40 (m,

# Example 3. 2-(4-Bromobenzyl)-8-[3-(2-methoxyphenyl)-3-phenylpropyl]-2,8-diaza-spiro[4.5]decan-1-one (Compound 44)

10

15

20

25

2H).

To trifluoroacetic acid (1.4 mL) at room temperature was added portion wise sodium borohydride (67 mg, 1.775 mmol). This mixture was stirred at room temperature for 30 minutes and then a solution of 2-(4-bromobenzyl)-8-[3-hydroxy-3-(2-methoxyphenyl)-3phenylpropyl]-2,8-diaza-spiro[4.5]decan-1-one (40 mg, 0.071 mmol) in DCM (0.5 mL) was slowly added.

The reaction mixture was stirred at room temperature for 20 hours and then poured into an ice cold solution of sodium hydroxide (5 mL). The mixture was extracted with ethyl acetate (3 x 5 mL) and the combined organic extracts were washed with brine (5 mL), dried over Na<sub>2</sub>SO<sub>4</sub>, filtered and concentrated. The crude product was purified by flash chromatography on silica gel (0% to 4% methanol/DCM) to give 24 mg (61%) of Compound 44 as a yellow oil.

- 10 <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>): δ [ppm] 7.43 (d, 2H), 7.38-7.32 (m, 1H), 7.26-7.2 (m, 5H), 7.12-6.94 (m, 5H), 6.35 (t, 1H), 4.36 (s, 2H), 3.7 (s, 3H), 3.2-2.9 (m, 5H), 2.1-1.9 (m, 2H), 1.85 (t, 2H).
- Table 2 of compounds illustrates some of the compounds of the present invention that were synthesized using the procedure described in scheme 2.

20

#### Table 2.

CPD# MOLSTRUCTURE

40 Pr

**COMPOUND NAME** 

2-(4-bromobenzyl)-8-[3-hydroxy-3-(2-methoxyphenyl)-3-phenylpropyl]-2,8-diaza-spiro[4.5]decan-1-one

**MOLWT PURITY** 

563.532 <sup>93%</sup> BY HPLC

2-(4-bromobenzyl)-8-[3-hydroxy-3-(3-methoxyphenyl)-3-phenylpropyl]-2,8-diaza-spiro[4.5]decan-1-one 563.532 <sup>99%</sup> BY **HPLC** 2-(4-bromobenzyl)-8-(3-hydroxy-3-phenyl-3-thiophen-2-yl-propyl)-2,8diaza-spiro[4.5]decan-1-one 42 539.535 97% BY HPLC 2-(4-bromobenzyl)-8-(3-hydroxy-3-phenyl-butyl)-2,8-diazaspiro[4.5]decan-1-one 43 471.436 99% BY HPLC 2-(4-bromobenzyl)-8-[3-(2-methoxyphenyl)-3-phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one 547.534 99% BY 44 **HPLC** 2-(4-bromobenzyl)-8-[3-(3chlorophenyl)-3-hydroxy-3-phenylpropyl]-2,8-diaza-spiro[4.5]decan-1-one 567.952 94% BY HPLC 45

BNEDOCID: -MO

200500765641 | >

48

49

2-(4-bromobenzyl)-8-[3-(4-chlorophenyl)-3-hydroxy-3-phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one

567.952 97% BY HPLC

2-(4-bromobenzyl)-8-[3-(3-chlorophenyl)-3-phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one

551.953 96% BY HPLC

2-(4-bromobenzyl)-8-(3-phenyl-3-thiophen-2-yl-propyl)-2,8-diazaspiro[4.5]decan-1-one

523.536 89% BY HPLC

2-(4-bromobenzyl)-8-[3-(4-chlorophenyl)-3-phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one

551.953 96% BY HPLC

Scheme 3.

# 5 Example 4. 2-(4-Bromobenzyl)-8-(3-hydroxy-3-phenylpropyl)-2,8-diaza-spiro[4.5]decan-1-one (Compound 50)

To a cold stirred solution of 2-(4-bromobenzyl)-8
(3-oxo-3-phenylpropyl)-2,8-diaza-spiro[4.5]decan-1one (350 mg, 0.769 mmol) in THF-methanol (7:3, 4.0
mL) was added NaBH4 (85 mg, 2.3 mmol). After
stirring for one hour, the reaction mixture was then
quenched with an aqueous solution of sodium

hydroxide (1N). The reaction mixture was portioned
in a separating funnel and the aqueous solution was
then extracted with ethyl acetate (3 x 10 mL). The
combined organic extracts were washed with brine and
dried over sodium sulfate. Evaporation of the

solvent gave Compound 50 as an oil (300 mg, 85.4%).

<sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>): δ [ppm] 7.44 (d x d, 2H), 7.40-7.3 (m, 4H), 7.26-7.23 (m, 1H), 7.09 (d x d, 2H), 4.94 (d x d, 1H), 4.39 (s, 2H), 3.14 (t, 2H), 3.1-2.9 (m, 2H), 2.7-2.5 (m, 2H), 2.3-1.8 (m, 9H), 5 1.6-1.4 (m, 2H).

# Example 5. 8-(3-Benzyloxy-3-phenylpropyl)-2-(4-bromobenzyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride

### 10 (Compound 51)

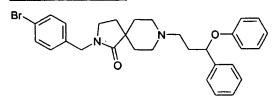
To an ice-cold stirred suspension of sodium hydride (23 mg, 60% in mineral oil, 0.6 mmol) in THF (0.5 mL) was added dropwise a solution of 2-(4-

- bromobenzyl)-8-(3-hydroxy-3-phenylpropyl)-2,8-diazaspiro[4.5]decan-1-one (91.4 mg, 0.2 mmol) in THF (0.6 mL). After stirring the reaction mixture at 0°C for 45 minutes benzyl bromide (0.071 mL, 0.6 mmol) was added and the mixture was then stirred
- overnight. The mixture was quenched with water and extracted with ethyl acetate (3 x 5 mL). The combined organic extracts were washed with brine, dried (Na<sub>2</sub>SO<sub>4</sub>), concentrated, and purified by semipreparative HPLC (method B) to yield **Compound 51** as
- 25 a white solid (13.0 mg, 22%). <sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  [ppm] 7.53-7.41 (m, 9H), 7.37 (t, 2H), 7.29 (m, 1H), 7.14 (t, 2H), 5.65 (d x

d, 1H), 4.69 (m, 1H), 4.59(d, 2H), 4.31 (d, 2H), 3.62 (m, 1H), 3.45 (m, 2H), 3.32 (m, 2H), 3.17 (t x d, 2H), 2.15 (m, 2H), 2.02-1.89 (m, 5H), 1.75 (m, 1H).

5

# Example 6. 2-(4-Bromobenzyl)-8-(3-phenoxy-3-phenylpropyl)-2,8-diaza-spiro[4.5]decan-1-one (Compound 52)



- 10 To a stirred solution of 2-(4-bromobenzyl)-8-(3-hydroxy-3-phenylpropyl)-2,8-diaza-spiro[4.5]decan-1-one (65 mg, 0.142 mmol) and phenol (13.3 mg, 0.142 mmol) in THF was added triphenylphosphine (37 mg, 0.142 mmol) followed by diethylazodicarboxylate
- 15 (DEAD) (0.023 mL, 0.142 mmol). After stirring for 24 hours, the reaction mixture was then concentrated and purified on silica gel preparative TLC using 20% ethyl acetate-hexanes as eluent. **Compound 52** was isolated as oil (12 mg, 15.8%).
- 20  $^{1}$ H NMR (CDCl<sub>3</sub>, 400 MHz): δ [ppm] 7.40-7.0 (m, 11H), 6.82-6.76 (m, 3H), 5.19 (d x d, 1H), 4.32 (s, 2H), 3.06 (t, 2H), 2.72 (m, 2H), 2.5-1.7 (m, 10H), 1.4-1.25 (m, 2H).

 $LC/MS: m/z 534.5 (MH^{+}).$ 

25

Scheme 4.

# 5 Example 7. (3-[2-(4-Bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-carbamic acid tert-butyl ester (Compound 53)

To a solution of 2.16 g (6 mmol) of 2-(4-

- bromobenzyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride in 100 mL of anhydrous DCE were added successively 1.5 g (6 mmol) of (3-oxo-1-phenylpropyl)-carbamic acid tert-butyl ester and 836  $\mu$ L (6 mmol) of triethylamine. The reaction mixture
- 15 was agitated at room temperature for 10 minutes before adding 2 g (9 mmol) of sodium triacetoxyborohydride. After an overnight agitation, 60 mL of satured solution of sodium bicarbonate was added. The solution was then extracted with DCM,
- 20 dried over sodium sulfate, filtered and concentrated

in vacuo. The crude mixture was purified by flash chromatography on silica gel eluting with methanol/DCM (0% to 5%) giving **Compound 53** as a white solid (2.97 g, 88.9%).

5 <sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  [ppm] 7.51 (d, 2H), 7.45 (d, 1H), 7.27 (m, 4H), 7.19 (m, 1H), 7.12 (d, 2H), 4.52 (q, 1H), 4.32 (s, 2H), 3.11 (t, 2H), 2.69 (m, 2H), 2.17 (m, 2H), 1.91 (br t, 2H), 1.82 (t, 2H), 1.71 (m, 4H), 1.33 (s, 9H), 1.29 (m, 2H).

10

## Preparation 9

8-(3-Amino-3-phenylpropyl)-2-(4-bromobenzyl)-2,8-diaza-spiro[4.5]decan-1-one

- 15 To 2.97 g (5.33 mmol) of {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-carbamic acid tert-butyl ester was added 48 mL of a 20% TFA solution in DCM. The reaction mixture was agitated one hour at room temperature before
- neutralizing with 120 mL of an aqueous solution of sodium hydroxide (1N). The solution was then extracted with DCM, dried over sodium sulfate, filtered and evaporated in vacuo yielding 8-(3-amino-3-phenylpropyl)-2-(4-bromobenzyl)-2,8-diaza-
- 25 spiro[4.5]decan-1-one as a pale yellow oil (2.43 g, 100%).

<sup>1</sup>H NMR (400 MHz, DMSO-d<sub>6</sub>): δ [ppm] 7.51 (d, 2H), 7.32-7.24 (m, 4H), 7.17 (m, 1H), 7.12 (d, 2H), 4.31 (s, 2H), 3.81 (t, 1H), 3.1 (t, 2H), 2.72 (d x d, 2H), 2.25-2.16 (m, 2H), 1.98 (br s, 2H), 1.86 (br q, 2H), 5 1.81 (t, 2H), 1.73-1.59 (m, 4H), 1.29 (br d, 2H).

## Example 8. N-{3-[2-(4-Bromobenzy1)-1-oxo-2,8-diaza-spiro[4.5]dec-8-y1]-1-phenylpropyl}-benzamide hydrochloride

## 10 (Compound 54)

To 100 mg (100 µmol, loading of 1 mmol/g) of phenylcarboxyl activated ester on polymeric 4-hydroxy-2,3,5,6-tetrafluorobenzamido (TFP) resin (see preparation in J.M. Salvino et al. J. Comb. Chem. 2000, 2, 691-697), preswollen with 0.5 mL of anhydrous DMF, was added 27.3 mg (60 µmol) of 8-(3-amino-3-phenylpropyl)-2-(4-bromobenzyl)-2,8-diaza-spiro[4.5]decan-1-one dissolved in 1 mL of DMF. The reaction was agitated overnight at room temperature. The mixture was filtered and washed with DCM (2 x 2 mL). The filtrates were collected and evaporated in vacuo. The crude mixture was purified by semi-preparative HPLC (method A) and 14.1 mg (39.4%) of Compound 54 was isolated as a colorless solid.

<sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ): δ [ppm] 9.64 (br s, 1H), 8.91 (d, 1H), 7.88 (d, 2H), 7.55-7.42 (m, 7H), 7.35 (t, 2H), 7.25 (t, 1H), 7.14 (d, 2H), 5.12 (m, 1H), 4.33 (s, 2H), 3.46 (m, 2H), 3.16 (m, 4H), 2.97 (m, 2H), 2.35 (m, 1H), 2.2 (m, 1H), 1.98 (m, 3H), 1.83 (t, 1H), 1.6 (br d, 2H). LC/MS: m/z 562.0 (MH<sup>+</sup>).

Table 3 of compounds illustrates some of the compounds of the present invention that were synthesized using the procedure described in scheme 4.

### 15 Table 3.

**CPD #MOLSTRUCTURE** 

COMPOUND NAME

{3-[2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}carbamic acid tert-butyl ester

MOLWT PURITY

556.541 >95% (1H NMR)

N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride

596.994 98+ (LC/MS)

55 HCI ON NOTE OF NOTE

N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2,6-dimethyl-benzamide hydrochloride

625.047 (LC/MS)

Cyclohexanecarboxylic acid {3-[2-(4bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}amide hydrochloride 603.041 (LC/MS) 56 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-2-phenyl-acetamide hydrochloride 57 611.02 (LC/MS) N-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-2-(2,4,6-trimethyl-phenyl)acetamide hydrochloride 653.101 (LC/MS) 58 N-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-phenyl-propionamide hydrochloride 625.047 (LC/MS) 59 {3-[2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}-570.568 >95% (1H methyl-carbamic acid tert-butyl ester 60 NMR)

N-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-N-methyl-benzamide hydrochloride 98+ 61 611.02 (LC/MS) Cyclohexanecarboxylic acid {3-[2-(4bromo-benzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}methyl-amide hydrochloride 98+ 62 617.068 HCI (LC/MS) N-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-N-methyl-2-phenyl-acetamide hydrochloride 63 (LC/MS) на N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-N-methyl-2-(2,4,6-trimethylphenyl)-acetamide hydrochloride 98+ 64 667.128 (LC/MS) [3-(1-oxo-2-pyridin-3-ylmethyl-2,8diaza-spiro[4.5]dec-8-yl)-1-phenyl-95% BY propyl]-carbamic acid tert-butyl ester 65 478.633 **HPLC** 

{3-[2-(4-methanesulfonyl-benzyl)-1oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-carbamic acid tert-butyl 555.736 94% (LC-66 MS) [3-[2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-(3-chloro-phenyl)propyl]-carbamic acid tert-butyl ester 590.986 >95% (1H 67 NMR) N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-HCI diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-acetamide hydrochlroride 94.6% 68 534.923 (LC/MS) Cyclopropanecarboxylic acid {3-[2-(4bromo-benzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}amide hydrochloride 95.2% 69 560.961 HCI (LC/MS) N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-isobutyramide hydrochloride 562.976 (LC/MS) 70

N-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-methyl-butyramide hydrochloride

98+ 577.003 (LC/MS)

N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-2-chloro-benzamide hydrochloride

98+ 631.439 (LC/MS)

N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-2-methoxy-benzamide hydrochloride

98+ 627.019 (LC/MS)

на

Pyridine-2-carboxylic acid {3-[2-(4bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}amide dihydrochloride

> 93.7 % 634.443 (LC/MS)

75

N-{3-(2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]- ı -phenylpropyl}-3-chloro-benzamide hydrochloride

> 98+ 631.439 (LC/MS)

diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-methoxy-benzamide hydrochloride 98+ 76 627.019 (LC/MS) N-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-nicotinamide dihydrochloride 634.443 (LC/MS) **77** N-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-4-chloro-benzamide hydrochloride 98+ 78 631.439 (LC/MS) N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-4-methoxy-benzamide hydrochloride 98+ 79 (LC/MS) N-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-ylj-1-phenylpropyl}-isonicotinamide dihydrochloride 98+ 80 634.443 (LC/MS)

N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-

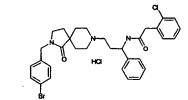
N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3,4-dichloro-benzamide hydrochloride

665.884 98+ (LC/MS)

82

N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3,4-dimethoxy-benzamide hydrochloride

657.045 98+ (LC/MS)



N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(2-chloro-phenyl)-acetamide hydrochloride

645.465 94.8% (LC/MS)

N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(2-methoxy-phenyl)-acetamide hydrochloride

641.046 98+ (LC/MS)

N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3-chloro-phenyl)-acetamide hydrochloride

645.465 92.9% (LC/MS)

86	N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-	N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3-methoxy-phenyl)-acetamide hydrochloride	641.046 98+ (LC/MS)
87	Ha Ha	N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-pyridin-3-yl-acetamide dihydrochloride	648.469 95+ (LC/MS)
88	NO NO CH <sub>3</sub>	N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(4-methoxy-phenyl)-acetamide hydrochloride	641.046 98+ (LC/MS)
89	HCI NO CI	N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3,4-dichloro-phenyl)-acetamide hydrochloride	679.911 95+ (LC/MS)
90	Br HCI	Tetrahydro-pyran-4-carboxylic acid{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	605.013 95+ (LC/MS)
91	N HCI	Cyclopentanecarboxylic acid {3-{2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	589.014 98+ (LC/MS)

Cyclobutanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

574.987 98+ (LC/MS)

Br NO NO

93

94

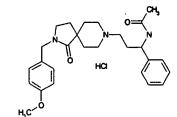
95

Cycloheptanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

617.068 98+ (LC/MS)

N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclohexyl-acetamide hydrochloride

617.068 98+ (LC/MS)



N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride

486.052 (LC/MS)

96 Ha

Cyclopropanecarboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

512.09 98+ (LC/MS)

N-{3-[2-(4-methoxy-benzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-isobutyramide hydrochloride 514.106 (LC/MS) 97 N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-methyl-butyramide hydrochloride 98 528.133 2-chloro-N-{3-[2-(4-methoxybenzyl)-1oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-benzamide hydrochloride 99 582.568 2-methoxy-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-benzamide hydrochloride 100 578.149

101

Pyridine-2-carboxylic acid {3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}amide dihydrochloride

585.572 (LC/MS)

(LC/MS)

95+

(LC/MS)

(LC/MS)

102 Ha

3-chloro-N-{3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride

582.568 (LC/MS)

103 <sub>Hgc</sub>, o

3-methoxy-N-{3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride

578.149 (LC/MS)

N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-nicotinamide dihydrochloride

585.572 98+ (LC/MS)

105 HG

4-chloro-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride

582.568 98+ (LC/MS)

106

4-methoxy-N-{3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride

578.149 (LC/MS)

N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-isonicotinamide dihydrochloride 107 98+ 585.572 (LC/MS) (R)-cyclohexanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro [4.5]dec-8-yl]-1-phenyl-propyl}-amide 108 100% 566.58 (LC/MS) 3,4-dichloro-N-{3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}benzamide hydrochloride 109 617.013 (LC/MS) 3,4-dimethoxy-N-{3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}benzamide hydrochloride 110 98+ 608.175 (LC/MS) 2-(2-chloro-phenyl)-N-{3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}acetamide hydrochloride 111 98+ 596.595 (LC/MS)

112	NC NO	N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(2-methox-phenyl)-acetamide hydrochloride	<b>592.176</b>	98+ (LC/MS)
113	NC NO NO NO	2-(3-chlorophenyl)-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride	596.595	98+ (LC/MS)
114	Ha O-CH,	N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3-methoxyphenyl)-acetamide hydrochloride	592.176	98+ (LC/MS)
115	Hai	N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-pyridin-3-yl-acetamide dihydrochloride	599.599	90+ (LC/MS)
116	No. No. Or or	N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(4-methoxyphenyl)-acetamide hydrochloride	592.176	98+ (LC/MS)
117	NO N	2-(3,4-dichlorophenyl)-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride	631.04	95+ (LC/MS)

Tetrahydro-pyran-4-carboxylic acid{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}amide hydrochloride

> 556.143 (LC/MS)

Cyclopentanecarboxylic acid {3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}amide hydrochloride

> 98+ 540.144 (LC/MS)

Cyclobutanecarboxylic acid {3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}amide hydrochloride

> 95+ 526.117 (LC/MS)

121

Cycloheptanecarboxylic acid {3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}amide hydrochloride

> 98+ 568.197 (LC/MS)

122

2-cyclohexyl-N-{3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}acetamide hydrochloride

568.197 (LC/MS)

123	Chirel N O	(S)-cyclohexanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide	566.58 99% BY HPLC
124	HO O N	N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopentyl-acetamide hydrochloride	603.041 98+ (LC/MS)
125	HOI ON N	Furan-2-carboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	586.955 98+ (LC/MS)
126	HCI O CH <sub>3</sub>	N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-ethyl-butyramide hydrochloride	591.03 98+ (LC/MS)
127	HCI NO N	Thiophene-2-carboxylic acid {3-[2-(4-brom-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	603.022 98+ (LC/MS)

N-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-2-(3,4-dimethoxyphenyl)-671.072 (LC/MS) acetamide hydrochloride 128 2-cyclopentyl-N-{3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}acetamide hydrochloride 554.171 (LC/MS) 129 Furan-2-carboxylic acid {3-[2-(4methox-benzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}amide hydrochloride 98+ 130 538.084 (LC/MS) 2-ethyl-N-{3-[2-(4-methoxybenzyl)-1oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-butyramide hydrochloride 131 98+ 542.16 (LC/MS) Thiophene-2-carboxylic acid {3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4:5]dec-8-yi]-1-phenyl-propyl}amide hydrochloride 132 98+ 554.151 (LC/MS)

2-(3,4-dimethoxy-phenyl)-N-{3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}acetamide hydrochloride 98+ 622.202 133 (LC/MS) Cyclohexanecarboxylic acid {3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}amide hydrochloride 98+ 134 554.171 (LC/MS) N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-benzamide hydrochloride 98+ 135 548.123 (LC/MS) N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-2-phenyl-acetamide hydrochloride 98+ 136 562.15 (LC/MS) N-{3-[2-(4-methanesulfonylbenzyl)-1oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-acetamide hydrochloride 534.117 (LC/MS) 137

138 O=S=0

Cyclopropanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl} amide hydrochloride

560.155 98+ (LC/MS)

N-{3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride

562.171 95% (LC/MS)

N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methyl-butyramide hydrochloride

576.198 98+ (LC/MS)

2-chloro-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride

630.633 98+ (LC/MS)

N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-methoxy-benzamde hydrochloride

626.214 98+ (LC/MS)

Pyridine-2-carboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide dihydrochloride

633.637 94.4% (LC/MS)

3-chloro-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride

630.633 94.1% (LC/MS)

145

N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methoxy-benzamide hydrochloride

626.214 98+ (LC/MS)

N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-nicotinamide dihydrochloride

633.637 98+ (LC/MS)

4-chloro-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride

630.633 98+ (LC/MS)

N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-4-methoxy-benzamide hydrochloride

626.214 98+ (LC/MS)

N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isonicotinamide dihydrochloride

633.637 98+ (LC/MS)

3,4-dichloro-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide hydrochloride

665.078 98+ (LC/MS)

151

N-{3-{2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3,4-dimethoxy-benzamide hydrochloride

656.24 98+ (LC/MS)

2-(2-chlorophenyl)-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride

644.66 88.1% (LC/MS)

N-{3-[2-(4-methanesulfonylbenzyl)-1oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-2-(2-methoxyphenyl)acetamide hydrochloride 98+ 153 640.241 (LC/MS) 2-(3-chlorophenyl)-N-{3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-acetamide hydrochloride 93% 154 644.66 (LC/MS) N-{3-[2-(4-methanesulfonylbenzyl)-1oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-2-(3-methoxyphenyl)acetamide hydrochloride 98+ 155 640.241 (LC/MS) N-{3-{2-(4-methanesulfonylbenzyl)-1oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-benzamide hydrochloride 98+ 156 596.188 (LC/MS) (S)-cyclohexanecarboxylic acid [3-(2benzyl-1-oxo-2,8-diaza-spiro[4.5]dec-8yl)-1-phenyl-propyl]-amide >95%

487.684

(HPLC)

157

N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(4-methoxyphenyl)-acetamide hydrochloride

640.241 98+ (LC/MS)

N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-phenyl-acetamide hydrochloride

610.215 98+ (LC/MS)

160 o= s=0

159

2-(3,4-dichlorophenyl)-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride

679.105 94+ (LC/MS)

161 O=S=O

Cyclopentanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

588.209 98+ (LC/MS)

Cyclobutanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

574.182 98+ (LC/MS)

Cycloheptanecarboxylic acid {3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-amide hydrochloride 616.262 (LC/MS) 163 2-cyclohexyl-N-{3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-acetamide hydrochloride 616.262 (LC/MS) 164 2-cyclopentyl-N-{3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-acetamide hydrochloride 602.236 (LC/MS) 165 Furan-2-carboxylic acid {3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-amide hydrochloride 586.149 (LC/MS) 166 2-ethyl-N-{3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-butyramide hydrochloride 98+ 167 590.225 (LC/MS)

Thiophene-2-carboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

602.216 98+ (LC/MS)

169

2-(3,4-dimethoxyphenyl)-N-{3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride

670.267 98+ (LC/MS)

Cyclohexanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

602.236 98+ (LC/MS)

171 HCI OF N

4-methyl-cyclohexanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

616.262 98+ (LC/MS)

2-methoxy-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide dihydrochloride

585.572 98+ (LC/MS)

3-chloro-N-[3-(1-oxo-2-pyridin-3ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-HCI 1-phenyl-propyl]-benzamide dihydrochloride 589.992 (LC/MS) 173 4-chloro-N-[3-(1-oxo-2-pyridin-3ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide HCI dihydrochloride 0= 589.992 (LC/MS) 174 4-methoxy-N-[3-(1-oxo-2-pyridin-3ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide HCI dihydrochloride 98+ 585.572 (LC/MS) 175 Cyclohexanecarboxylic acid [3-[2-(4bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yi]-1-(3-chloro-phenyl)-94.3% propyl]-amide hydrochloride 176 637.486 (LC/MS) N-[3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-(3chlorophenyl)-propyl]-benzamide hydrochloride 177 631.439 (LC/MS) N-[3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-(3chlorophenyl)-propyl]-2-phenyl-98+ 645.465 178 acetamide hydrochloride (LC/MS)

{1-(3-chlorophenyl)-3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-propyl}-carbamic 542.116 >95% (1H 179 acid tert-butyl ester NMR) {1-(3,4-dichlorophenyl)-3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-propyl}-carbamic >95% 180 acid tert-butyl ester 576.561 (1H NMR) N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8diaza-spiro[4.5]dec-8-yl)-1-phenylpropyl]-acetamide dihydrochloride 90+ 181 493.476 (LC/MS) Cyclopropanecarboxylic acid [3-(1-oxo-HCI 2-pyridin-3-ylmethyl-2,8-diazaspiro[4.5]dec-8-yl)-1-phenyl-propyl]amide dihydrochloride 98+ 182 519.513 (LC/MS) N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-HCI diaza-spiro[4.5]dec-8-yl)-1-phenylpropyl]-isobutyramide dihydrochloride 98+ 183 521.529 (LC/MS) 3-methyl-N-[3-(1-oxo-2-pyridin-3ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-HCI 1-phenyl-propyl]-butyramide dihydrochloride 98+ 184 535.556 (LC/MS)

2-chloro-N-[3-(1-oxo-2-pyridin-3ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-HCI 1-phenyl-propyl]-benzamide dihydrochloride 98+ 589.992 185 (LC/MS) Pyridine-2-carboxylic acid [3-(1-oxo-2-HO pyridin-3-ylmethyl-2,8-diazaspiro[4.5]dec-8-yl)-1-phenyl-propyl]amide trihydrochloride 98+ 186 592.995 (LC/MS) 3-methoxy-N-[3-(1-oxo-2-pyridin-3ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide dihydrochloride 98+ 187 585.572 (LC/MS) N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8diaza-spiro[4.5]dec-8-yl)-1-phenyl-HCI HCI propyl]-nicotinamide trihydrochloride 98+ 188 592.995 (LC/MS) N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8diaza-spiro[4.5]dec-8-yl)-1-phenyl-HCI HCI propyl]-isonicotinamide trihydrochloride 98+ 189 592.995 (LC/MS)

3,4-dichloro-N-[3-(1-oxo-2-pyridin-3ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide dihydrochloride 624.437 (LC/MS) 190 3,4-dimethoxy-N-[3-(1-oxo-2-pyridin-3ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide HC dihydrochloride 98+ 191 615.598 (LC/MS) 2-(2-chlorophenyl)-N-[3-(1-oxo-2pyridin-3-ylmethyl-2,8-diazaspiro[4.5]dec-8-yl)-1-phenyl-propyl]acetamide dihydrochloride 98+ 192 604.018 (LC/MS) 2-(2-methoxyphenyl)-N-[3-(1-oxo-2pyridin-3-ylmethyl-2,8-diazaspiro[4.5]dec-8-yl)-1-phenyl-propyl]acetamide dihydrochloride 98+ 193 599.599 (LC/MS) N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8diaza-spiro[4.5]dec-8-yl)-1-phenyl-HÇI propyl]-benzamide dihydrochloride 555.546 (LC/MS) 194

2-(3-chloro-phenyl)-N-[3-(1-oxo-2pyridin-3-ylmethyl-2,8-diazaspiro[4.5]dec-8-yl)-1-phenyl-propyl]acetamide dihydrochloride 604.018 (LC/MS) 195 на 2-(3-methoxyphenyl)-N-[3-(1-oxo-2pyridin-3-ylmethyl-2,8-diazaspiro[4.5]dec-8-yl)-1-phenyl-propyl]acetamide dihydrochloride 93.3% 196 599.599 (LC/MS) 2-(4-methoxyphenyl)-N-[3-(1-oxo-2pyridin-3-ylmethyl-2,8-diazaspiro[4.5]dec-8-yl)-1-phenyl-propyl]acetamide dihydrochloride 599.599 (LC/MS) 197 N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8diaza-spiro[4.5]dec-8-yl)-1-phenylpropyl]-2-phenyl-acetamide dihydrochloride 93.3% 569.573 198 (LC/MS) 2-(3,4-dichloro-phenyl)-N-[3-(1-oxo-2pyridin-3-ylmethyl-2,8-diazaspiro[4.5]dec-8-yl)-1-phenyl-propyl]acetamide dihydrochloride 91.5% 199 638.463 (LC/MS)

Cyclopentanecarboxylic acid [3-(1-oxo-HCI 2-pyridin-3-ylmethyl-2,8-diazaspiro[4.5]dec-8-yl)-1-phenyl-propyl]amide dihydrochloride 98+ 200 547.567 (LC/MS) {1-(3-chlorophenyl)-3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-propyl}->95% 590.181 (1H NMR) 201 carbamic acid tert-butyl ester Cyclobutanecarboxylic acid [3-(1-oxo-HCI 2-pyridin-3-ylmethyl-2,8-diazaspiro[4.5]dec-8-yl)-1-phenyl-propyl]amide dihydrochloride 95+ 202 533.54 (LC/MS) Cycloheptanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diazaspiro[4.5]dec-8-yl)-1-phenyl-propyl]-HCI amide dihydrochloride 94.5% 203 575.621 (LC/MS) 2-cyclohexyl-N-[3-(1-oxo-2-pyridin-3ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide dihydrochloride 93.4% 204 575.621 (LC/MS)

2-cyclopentyl-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide dihydrochloride

561.594 94.6% (LC/MS)

206 HCI N N N N N

Furan-2-carboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl-amide dihydrochloride

545.508 98+ (LC/MS)

Ha O CH

207

2-ethyl-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-butyramide dihydrochloride

549.583 93.9% (LC/MS)

208 HCI N O N N

Thiophene-2-carboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride

561.575 98+ (LC/MS)

2-(3,4-dimethoxyphenyl)-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide dihydrochloride

629.625 98+ (LC/MS)

Cyclohexanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-HCI spiro[4.5]dec-8-yl)-1-phenyl-propyl]amide dihydrochloride 98+ 210 561.594 (LC/MS) 4-methyl-cyclohexanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8на diaza-spiro[4.5]dec-8-yl)-1-phenylна propyl]-amide dihydrochloride 92.1% 211 575.621 (LC/MS) [3-[2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-(3methoxyphenyl)-propyl]-carbamic acid tert-butyl ester >99% 212 586.567 (LC-MS) [3-[2-(4-methoxybenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-(3methoxyphenyl)-propyl]-carbamic acid >99% tert-butyl ester 213 537.697 (LC-MS) (S)-N-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-acetamide hydrochloride 98+ 214 534.923 (LC/MS) (S)-cyclopropanecarboxylic acid {3-[2-(4-bromobenz/l)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}amide hydrochloride 98+ 215 560.961 (LC/MS)

(S)-N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride

562.976 98+ (LC/MS)

217 HG CH, Chirel

(S)-N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methyl-butyramide hydrochloride

577.003 98+ (LC/MS)

(S)-cyclopentanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

589.014 (LC/MS)

(S)-cyclobutanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

574.987 98+ (LC/MS)

[3-[2-(4-methoxybenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-(4methoxyphenyl)-propyl]-carbamic acid tert-butyl ester 95% BY 220 537.697 **HPLC** {3-[2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-pyridin-2-ylpropyl}-carbamic acid tert-butyl ester 99% BY 221 557.529 **HPLC** {3-[2-(4-methoxybenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-ylpropyl}-carbamic acid tert-butyl ester 99% BY 222 508.659 **HPLC** {1-(3,4-dichlorophenyl)-3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-propyl}-624.626 >95% (1H 223 carbamic acid tert-butyl ester NMR) 2-cyclopropyi-N-{3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}acetamide hydrochloride 526.117 (LC/MS) 98+ 224 2-cyclopropyl-N-{3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenyl-94.4% 225 574.182 propyl}-acetamide hydrochloride (LC/MS) [3-[2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-(4methoxyphenyl)-propyl]-carbamic acid 95% BY 226 tert-butyl ester 586.567 **HPLC** 

227 HCI

N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-acetamide hydrochloride

574.987 98+ (LC/MS)

228 Pr NC CH,

[3-[2-(4-bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-(3,4dimethoxyphenyl)-propyl]-carbamic acid tert-butyl ester

616.593 99% BY HPLC

229 H.C. CH,

{1-(3,4-dimethoxyphenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester

567.722 97% BY HPLC

230

Tetrahydro-pyran-4-carboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

604.208 >95% (HPLC)

[3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3methoxy-phenyl)-propyl]-carbamic acid tertbutyl ester >99% 231 585.762 (HPLC) (S)-{3-[2-(4-methanesulfonylbenzyl)-1oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-carbamic acid tert-butyl >99% 232 555.736 (HPLC) {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-carbamic acid tert-butyl ester 95% BY 233 556.724 **HPLC** {1-(3,4-dimethoxyphenyl)-3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-propyl}carbamic acid tert-butyl ester 97% BY 234 615.787 **HPLC** {1-(4-chlorophenyl)-3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester >90% 235 (HNMR)

236	H,C, CH,	{1-(2-chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester	542.116	>90% (HNMR)
237	H,C, OH,	{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid tert-butyl ester	513.699	>90% (HNMR)
238	Cty Cty NCCCH	[3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxyphenyl)-propyl]-carbamic acid tert-butyl ester	585.762	95% BY HPLC
239	Br CI	[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-(4-chlorophenyl)- propyl]-carbamic acid tert-butyl ester	590.986	>90% (HNMR)
240	N CI O	[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-(2-chlorophenyl)- propyl]-carbamic acid tert-butyl ester	590.986	>90% (HNMR)
241		{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid tert-butyl ester	562.569	>90% (HNMR)

242	N N N N N N N N N N N N N N N N N N N	{1-(4-chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester	590.181	>90% (HNMR)
243	O CI	{1-(2-chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl ester	590.181	>90% (HNMR)
244		{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid tert-butyl ester	561.764	>90% (HNMR)
245	O Chiral	(S)-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide	525.71	98+ (LC/MS)
246	Br Br	[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-(2- methoxyphenyl)-propyl]-carbamic acid tert-butyl ester	586.567	89% BY HPLC
247		[3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-carbamic acid tert-butyl ester	537.697	86% BY HPLC
248	N a H	[1-(2-chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid tert-butyl ester	513.078	>90% (HNMR)

249	N CI	[1-(3-chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid tert-butyl ester	513.078	>90% (HNMR)
250		[1-(3,4-dichlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid tert-butyl ester	547.523	>90% (HNMR)
251	N	[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-carbamic acid tert-butyl ester	484.661	>90% (HNMR)
252	O Chiral	(S)-8-[3-(cyclopropanecarbonyl-amino)-3-phenyl-propyl]-2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane hydrochloride	560.155	98+ (LC/MS)
253	O Chiral	(S)-8-[3-(cyclopentanecarbonyl-amino)- 3-phenyl-propyl]-2-(4- methanesulfonylbenzyl)-1-oxo-2,8- diaza-spiro[4.5]decane hydrochloride	588 209	98+ (LC/MS)
254	Olympia Ci Chiral	(S)-8-[3-(cyclohexanecarbonyl-amino)-3-phenyl-propyl]-2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane hydrochloride	602.236	98+ (LC/MS)
255	H Cl H O Chiral	(S)-8-[3-(cyclopropanecarbonyl-amino)-3-phenyl-propyl]-2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane hydrochloride	512.09	98+ (LC/MS)

256	H CI-Chiral	(S)-8-(3-isobutyrylamino-3-phenyl-propyl)-2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane hydrochloride	514.106	98+ (LC/MS)
257	H CI Chiral	(S)-8-[3-(cyclopentanecarbonyl-amino)- 3-phenyl-propyl]-2-(4-methoxybenzyl)- 1-oxo-2,8-diaza-spiro[4.5]decane hydrochloride	540.144	98+ (LC/MS)
258	h a chial o	(S)-8-[3-(cyclohexanecarbonyl-amino)- 3-phenyl-propyl]-2-(4-methoxybenzyl)- 1-oxo-2,8-diaza-spiro[4.5]decane hydrochloride	554.171	98+ (LC/MS)
259	HCI N	N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-isobutyramide hydrochloride	569.005	98+ (LC/MS)
260	HCI HCI HCI S	Cyclobutanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride	581.016	98+ . (LC/MS)
261	HCI HAVO	Cyclopentanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride	595.042	98+ (LC/MS)
262	HCI H	N-{3-[2-(4-bromo-enzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-propionamide hydrochloride	554.978	98+ (LC/MS)

263	HCI HCI S	N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-2-methoxy-acetamide hydrochloride	570.977	98+ (LC/MS)
264	HCI HNO S	Cyclohexanecarboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride	609.069	98+ (LC/MS)
265	HCI NO S	Cyclopropanecarboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride	518.118	98+ (LC/MS)
266	HCi N N S	N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-isobutyramide hydrochloride	520.134	98+ (LC/MS)
267	H <sub>C</sub> COH <sub>3</sub>	[3-[2-(4-methanesulfonylbenzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(2- methoxyphenyl)-propyl]-carbamic acid tert-butyl ester	585.762	89% BY HPLC
268	HC S	Cyclobutanecarboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride	532.145	98+ (LC/MS)

269 270

Cyclopentanecarboxylic acid {3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-thiophen-2-ylpropyl}-amide hydrochloride

546.172 (LC/MS)

N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-thiophen-2yl-propyl}-propionamide hydrochloride

> 98+ 506.107 (LC/MS)

271

2-methoxy-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1thiophen-2-yl-propyl}-acetamide hydrochloride

> 98+ 522.106 (LC/MS)

272

Cyclohexanecarboxylic acid {3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-thiophen-2-ylpropyl}-amide hydrochloride

> 98+ 560.199 (LC/MS)

273

Cyclopropane carboxylic acid{3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-thiophen-2yl-propyl}-amide hydrochloride

> 98+ 566.183 (LC/MS)

274 O N HCI S

N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-isobutyramide hydrochloride

568.199 98+ (LC/MS)

Cyclobutanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride

580.21 95.2% (LC/MS)

Cyclopentanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride

594.237 98+ (LC/MS)

277 O=N
HCI
N
HCI

N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-propionamide hydrochloride

554.172 (LC/MS)

N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-2-methoxy-acetamide hydrochloride

570.171 98+ (LC/MS) Cyclohexanecarboxylic acid {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride

608.264 98+ (LC/MS)

280 NHCI S

Cyclohexanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-amide dihydrochloride

525.542 98+ (LC/MS)

281 H;C CH,

N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-isobutyramide dihydrochloride

527.557 98+ (LC/MS)

282 NHCI S

Cyclobutanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-amide dihydrochloride

539.568 98+ (LC/MS)

283 NHCI NHCI S

Cyclopentanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-amide dihydrochloride

553.595 98+ (LC/MS) 284 NHCI S

N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-propionamide dihydrochloride

513.531 80.8% (LC/MS)

285 NHCI S

Cyclohexanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-amide dihydrochloride

567.622 94.3% (LC/MS)

Cyclopropanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-amide hydrochloride

595.406 98+ (LC/MS)

287 HCI NO CI

N-[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-isobutyramide hydrochloride

597.421 98+ (LC/MS)

Cyclobutanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-amide hydrochloride

609.432 98+ (LC/MS)

Cyclopentanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-amide hydrochloride

623.459 98+ (LC/MS)

290 N HCI N CI

N-[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-propionamide hydrochloride

583.395 98+ (LC/MS)

N-[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-2-methoxy-acetamide hydrochloride

599.394 (LC/MS)

Table 3a of compounds illustrates some additional compounds of the present invention that were synthesized using the procedure described in scheme 4.

Table 3a.

CPD# MOLSTRUCTURE

COMPOUND NAME

MOLWT PURITY

292	Chiral O HO O HO	2-Cyclopropyl-N-{(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride	574.182	99% (LC/MS)
293	Chiral N N N N N N N N N N N N N N N N N N N	2-Cyclopropyl-N-{(S)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride	526.117	99% (LC/MS)
294	Chirali	Cyclopentanecarboxylic acid [(S)-3-(2-benzyl-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide hydrochloride	510.118	98+ (LC/MS)
295	Chiral HO N	Cyclopropanecarboxylic acid [(S)-3-(2-benzyl-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide hydrochloride	482.064	91.6% (LC/MS)
296		Cyclohexanecarboxylic acid [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-amide hydrochloride	637.486	98% (LC/MS)
<b>297</b>	CI HCI NON ON	Cyclopropanecarboxylic acid {1-(3-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	546.535	98% (LC/MS)
298		N-{1-(3-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride	548.551	98% (LC/MS)

299	CL HCI	Cyclobutanecarboxylic acid {1-(3-chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	560.562	98% (LC/MS)
300		Cyclopentanecarboxylic acid {1-(3-chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	574.589	98% (LC/MS)
301	CI HCI	N-{1-(3-Chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-propionamide hydrochloride	534.524	95% (LC/MS)
302	C1	N-{1-(3-Chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2-methoxy-acetamide hydrochloride	550.523	98% (LC/MS)
303	C1	Cyclohexanecarboxylic acid {1-(3-chlorophenyl)-3-[2-(4-methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	588.616	98% (LC/MS)
304		Cyclopropanecarboxylic acid {1-(3-chlorophenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	594.6	98% (LC/MS)

305	CA	N-{1-(3-Chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride	596.616	98% (LC/MS)
306	C	Cyclobutanecarboxylic acid {1-(3-chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	608.627	98% (LC/MS)
307	C + + + C   +	Cyclopentanecarboxylic acid {1-(3-chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	622.654	98% (LC/MS)
308	C	N-{1-(3-Chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-propionamide hydrochloride	582.589	98% (LC/MS)
309	CI	N-{1-(3-Chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2-methoxy-acetamide hydrochloride	598.588	95% (LC/MS)
310	CI HCI N	Cyclopropanecarboxylic acid [1-(3-chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	553.958	93.2% (LC/MS)

311	CI HCI N	N-[1-(3-Chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-isobutyramide dihydrochloride	555.974	94.1% (LC/MS)
312	CI HCI N	Cyclobutanecarboxylic acid [1-(3-chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	567.985	98% (LC/MS)
313	CI HCI N	Cyclopentanecarboxylic acid [1-(3-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	582.012	98% (LC/MS)
314	CI HCI N	N-[1-(3-Chlorophenyl)-3-(1-oxo-2- pyridin-3-ylmethyl-2,8-diaza- spiro[4.5]dec-8-yl)-propyl]- propionamide dihydrochloride	541.948	93.8% (LC/MS)
315	CI HCI N	N-[1-(3-Chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-2-methoxy-acetamide dihydrochloride	557.946	94.4% (LC/MS)
316	CL HCI N	Cyclohexanecarboxylic acid [1-(3-chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	596.039	94.7% (LC/MS)

317	HCI N N N N N N N N N N N N N N N N N N N	Cyclopropanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-2-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride	519.513	98% (LC/MS)
318	HCI N N O	Cyclopentanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-2-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride	547.567	98% (LC/MS)
319	HCI N N N N N N N N N N N N N N N N N N N	Cyclopropanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride	519.513	98% (LC/MS)
320	CIH NO CIH	Cyclopentanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride	547.567	98% · (LC/MS)
321	CIH H	Cyclopropanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-4-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride	519.513	98% (LC/MS)
322	CIH THE COLOR	Cyclopentanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-4-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide dihydrochloride	547.567	98% (LC/MS)

323	O. N. O. CIH H. O.	Cyclopropanecarboxylic acid {(S)-3-[1-oxo-2-(1-oxy-pyridin-2-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	499.052	98% (LC/MS)
324	O-N-O	Cyclopentanecarboxylic acid {(S)-3-[1-oxo-2-(1-oxy-pyridin-2-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	527.105	98% (LC/MS)
325	CIH H	Cyclopropanecarboxylic acid {(S)-3-[1-oxo-2-(1-oxy-pyridin-3-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	499.052	98% (LC/MS)
326	CIH N	Cyclopentanecarboxylic acid {(S)-3-[1-oxo-2-(1-oxy-pyridin-3-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	527.105	98% (LC/MS)
327	ZIH HZ	Cyclopropanecarboxylic acid {(S)-3-[1-oxo-2-(1-oxy-pyridin-4-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	499.052	98% (LC/MS)
328	CIH H	Cyclopentanecarboxylic acid {(S)-3-[1-oxo-2-(1-oxy-pyridin-4-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	527.105	98% (LC/MS)

<b>329</b>	CIH NO CIH N	Cyclopentanecarboxylic acid {3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride	626.463	98% (LC/MS)
330	CIH N	N-{3-[2-(4-Bromo-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1- pyridin-2-yl-propyl}-propionamide dihydrochloride	586.398	98% (LC/MS)
331	CIH H O CIH N	N-{3-[2-(4-Bromo-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1- pyridin-2-yl-propyl}-2-methoxy- acetamide dihydrochloride	602.398	98% (LC/MS)
332	CIH N	Cyclopropanecarboxylic acid {3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride	549.539	98% (LC/MS)
333	CIH N	N-{3-[2-(4-Methoxy-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1- pyridin-2-yl-propyl}-isobutyramide dihydrochloride	551.555	98% (LC/MS)
334	CIH N	Cyclobutanecarboxylic acid {3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride	563.566	98% (LC/MS)

335 ·	CIH N	Cyclopentanecarboxylic acid {3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride	577.593	98% (LC/MS)
336	CIH N	N-{3-[2-(4-Methoxy-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1- pyridin-2-yl-propyl}-propionamide dihydrochloride	537.528	98% (LC/MS)
337	CIH N	2-Methoxy-N-{3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-acetamide dihydrochloride	553.527	98% (LC/MS)
338	CIH NO CI	Cyclopropanecarboxylic acid {3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride	597.604	98% (LC/MS)
339	CIH H	N-{3-[2-(4-Methanesulfonyibenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-isobutyramide dihydrochloride	599.62	98% (LC/MS)
340	CIH N	Cyclobutanecarboxylic acid {3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride	611.631	98% (LC/MS)

341	CIH N	Cyclopropanecarboxylic acid {3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride	598.409	98% (LC/MS)
342	CIH N	N-{3-[2-(4-Bromo-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1- pyridin-2-yl-propyl}-isobutyramide dihydrochloride	600.425	98% (LC/MS)
343	Br CIH HNO CIH N	Cyclobutanecarboxylic acid {3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride	612.436	98% (LC/MS)
344	CIH N	Cyclopentanecarboxylic acid {3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-amide dihydrochloride	625.658	98% (LC/MS)
345	CIH NO CI	N-{3-[2-(4-Methanesulfonyl- benzyl)-1-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-pyridin-2-yl- propyl}-propionamide dihydrochloride	585.593	95.2% (LC/MS)
346	Chiral N N N N N N N N N N N N N N N N N N N	N-{(S)-3-[2-(4-Methanesulfonylbenzyl)-1-oxo-2,8-diazc spiro[4.5]dec-8-yl]-1-phenylpropyl}-nicotinamide	560.715	91% (HPLC)

347	Chlral N N N N N N N N N N N N N N N N N N N	(R)-Tetrahydro-furan-2-carboxylic acid {(S)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-amide	553.72	99% (HPLC)
348	Chiral N N N N N N N N N N N N N N N N N N N	(S)-Tetrahydro-furan-2-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide	553.72	99% (HPLC)
349	O Chiral	Tetrahydro-furan-3-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide	553.72	99% (HPLC)
350	Chiral	(R)-N-{(S)-3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-phenyl-propionamide	587.781	84% (HPLC)
351	OChiral O S S O	3-Oxo-cyclopentanecarboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide	565.731	84% (HPLC)
352	Chiral	(S)-N-{(S)-3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phc=;1-propyl}-2-phenyl-propionamide	587.781	86% (HPLC)

353	Chiral	(R)-N-[(S)-3-(1-Oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-2-phenyl-propionamide	510.678	97% (HPLC)
354	Chiral	(S)-N-[(S)-3-(1-Oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-2-phenyl-propionamide	510.678	99% (HPLC)
355	Chiral	(R)-Tetrahydro-furan-2-carboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide	476.617	97% (HPLC)
356	Chiral N O	(S)-Tetrahydro-furan-2-carboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide	476.617	99% (HPLC)
357	O Chiral	Tetrahydro-furan-3-carboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide	476.617	98% (HPLC)
358	OChiral N	3-Oxo-cyclopentanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide	488.628	96% (HPLC)

359	Chiral	N-[(S)-3-(1-Oxo-2-pyridin-2-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-isobutyramide	448.607	97% (HPLC)
360	Chiral	N-[(S)-3-(1-Oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-isobutyramide	448.607	99% (HPLC)
361	Chiral	N-[(S)-3-(1-Oxo-2-pyridin-4- ylmethyl-2,8-diaza-spiro[4.5]dec-8- yl)-1-phenyl-propyl]-isobutyramide	448.607	98% (HPLC)
362	Chiral	N-{(S)-3-[1-Oxo-2-(1-oxy-pyridin-4-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide	464.606	90% (HPLC)
363	O N O Chiral	N-{(S)-3-[1-Oxo-2-(1-oxy-pyridin-2-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide	464.606	98% (HPLC)
364	Chiral	N-{(S)-3-[1-Oxo-2-(1-oxy-pyridin-3-ylmethyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide	464.606	99% (HPLC)

365	Chiral	1-Methyl-cyclopentanecarboxylic acid {(S)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide	565.775	100% (LC/MS)
366	On Schiral	1-Methyl-cyclohexanecarboxylic acid{(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide	579.802	>80% (LC/MS)
367	O Chiral	2-Cyclopentyl-N-{(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-propionamide	579.802	100% (LC/MS)
368	Chiral O = NH	2-Cyclopentyl-N-{(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-propionamide	579.802	100% (LC/MS)
369	N Chiral	1-Methyl-cyclopentanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethy-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide	488.672	100% (LC/MS)
370	N Chiral	1-Methyl-cyclohexanecarboxylic acid[(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide	502.699	100% (LC/MS)
371	Chiral N	2-Cyclopentyl-N-[(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-propionamide	502.699	100% (LC/MS)

372	O NH NH	2-Cyclopentyl-N-[(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-propionamide	502.699	100% (LC/MS)
373	CIH THO	Cyclopropanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride	590.986	98% (LC/MS)
374	CIH NOO	N-[3-[2-(4-Bromo-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(2- methoxy-phenyl)-propyl]- isobutyramide hydrochloride	593.002	98% (LC/MS)
375	CIH H	Cyclobutanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride	605.013	98% (LC/MS)
376		Tetrahydro-pyran-2-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide	567.747	99% (HPLC)
377	N HCI HO	N-{3-[2-(4-Methoxy-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1- thiophen-2-yl-propyl}-2,2-dimethyl- propionamide hydrochloride	534.161	98% (LC/MS)
378	N HCI H	N-{3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-2,2-dimethyl-propionamide hydrochloride	582.226	98% (LC/MS)

379	NHCI H	N-{1-(3-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2,2-dimethyl-propionamide hydrochloride	562.578	93.9% (LC/MS)
380	HCI N————————————————————————————————————	N-{1-(3-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2,2-dimethyl-propionamide hydrochloride	610.643	98% (LC/MS)
381	N HCI H N O	N-[1-(3-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-2,2-dimethyl-propionamide dihydrochloride	570:001	98% (LC/MS)
382	N- HCI CI-	N-{1-(2-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2,2-dimethyl-propionamide hydrochloride	610.643	98% (LC/MS)
383	N-HCI HCI	N-{1-(4-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2,2-dimethyl-propionamide hydrochloride	610.643	98% (LC/MS)
384	N HCI S	1-Methyl-cyclopropanecarboxylic acid {3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride	532.145	98% (LC/MS)
385	N HCI S	1-Methyl-cyclopropanecarboxylic acid {3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride	580.21	98% (LC/MS)

386	N HCI S	1-Methyl-cyclopropanecarboxylic acid [3-(1-oxo-2-pyridin-3-ylmethyl- 2,8-diaza-spiro[4.5]dec-8-yl)-1- thiophen-2-yl-propyl]-amide dihydrochloride	539.568	98% (LC/MS)
387	N HCI HCI	1-Methyl-cyclopropanecarboxylic acid {1-(3-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	560.562	92.4% (LC/MS)
388	N-HCI HCI CI	1-Methyl-cyclopropanecarboxylic acid {1-(3-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	608.627	98% (LC/MS)
389	N HCI HCI CI	1-Methyl-cyclopropanecarboxylic acid [1-(3-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	567.985	92.5% (LC/MS)
390	N-HCI HCI CI	1-Methyl-cyclopropanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	608.627	98% (LC/MS)
391	O HCI HCI	1-Methyl-cyclopropanecarboxylic acid {1-(4-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	608.627	98% (LC/MS)
392		Tetrahydro-pyran-2-carboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide	490.644	94% (HPLC)

393	CIH N	Cyclopentanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride	619.04	98% (LC/MS)
394	CIH H	N-[3-[2-(4-Bromo-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(2- methoxy-phenyl)-propyl]- propionamide hydrochloride	578.975	98% (LC/MS)
395	BI CIH H	N-[3-[2-(4-Bromo-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(2- methoxy-phenyl)-propyl]-2- methoxy-acetamide hydrochloride	594.974	98% (LC/MS)
396	CIH NOO	N-[3-[2-(4-Bromo-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(2- methoxy-phenyl)-propyl]-2- cyclopropyl-acetamide hydrochloride	605.013	98% (LC/MS)
397	CIH D	Cyclohexanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride	633.067	98% (LC/MS)
398	NCIH NCIH	Cyclopropanecarboxylic acid [3-[2- (4-methoxy-benzyl)-1-oxo-2,8- diaza-spiro[4.5]dec-8-yl]-1-(2- methoxy-phenyl)-propyl]-amide hydrochloride	542.116	98% (LC/MS)
399	CIH H	N-[3-[2-(4-Methoxy-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(2- methoxy-phenyl)-propyl]- isobutyramide hydrochloride	544.132	98% (LC/MS)

400	CIH	Cyclobutanecarboxylic acid [3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride	556.143	98% (LC/MS)
401	CIH N-	Cyclopentanecarboxylic acid [3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride	570.17	98% (LC/MS)
402	CIH H	N-[3-[2-(4-Methoxy-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(2- methoxy-phenyl)-propyl]- propionamide hydrochloride	530.105	98% (LC/MS)
403	CIH H	2-Methoxy-N-[3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-acetamide hydrochloride	546.104	98% (LC/MS)
404	CIH H	2-Cyclopropyl-N-[3-[2-(4-methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-(2-methoxyphenyl)-propyl]-acetamide hydrochloride	556.143	98% (LC/MS)
405	CIH II	Cyclohexanecarboxylic acid [3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride	584.196	98% (LC/MS)
406	CIH H	Cyclopropanecarboxylic acid [3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride	590.181	98% (LC/MS)

407	CIH NOON	N-[3-[2-(4-Methanesulfonyl- benzyl)-1-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-(2-methoxy- phenyl)-propyl]-isobutyramide hydrochloride	592.197	98% (LC/MS)
408	N CIH H	Cyclobutanecarboxylic acid [3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride	604.208	98% (LC/MS)
409	CIM NOW	Cyclopentanecarboxylic acid [3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride	618.235	98% (LC/MS)
410	CIH N- N- N- N- N- N- N- N- N- N- N- N- N-	N-[3-[2-(4-Methanesulfonyl- benzyl)-1-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-(2-methoxy- phenyl)-propyl]-propionamide hydrochloride	578.17	98% (LC/MS)
411	CIH HOO	N-[3-[2-(4-Methanesulfonyl- benzyl)-1-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-(2-methoxy- phenyl)-propyl]-2-methoxy- acetamide hydrochloride	594.169	98% (LC/MS)
412	O S S S S S S S S S S S S S S S S S S S	2-Cyclopropyl-N-[3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-acetamide hydrochloride	604.208	98% (LC/MS)
413	CiH H	Cyclopropanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-amide hydrochloride	590.986	98% (LC/MS)

414	CIH H	N-[3-[2-(4-Bromo-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(4- methoxy-phenyl)-propyl]- isobutyramide hydrochloride	593.002	98% (LC/MS)
415	CIH H	Cyclobutanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-amide hydrochloride	605.013	98% (LC/MS)
416	CIH NO CIH	Cyclopentanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-amide hydrochloride	619.04	98% (LC/MS)
417	CIH H	N-[3-[2-(4-Bromo-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(4- methoxy-phenyl)-propyl]- propionamide hydrochloride	578.975	98% (LC/MS)
418	CIH H	N-[3-[2-(4-Bromo-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(4- methoxy-phenyl)-propyl]-2- methoxy-acetamide hydrochloride	594.974	98% (LC/MS)
419	CiH H	Cyclopropanecarboxylic acid [3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-amide hydrochloride	542.116	98% (LC/MS)
420	NCIH H	N-[3-[2-(4-Methoxy-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl}-1-(4- methoxy-phenyl)-propyl]- isobutyramide hydrochloride	544.132	98% (LC/MS)

421	N CIH H	Cyclobutanecarboxylic acid [3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-amide hydrochloride	556.143	98% (LC/MS)
422	CIH H	Cyclopentanecarboxylic acid [3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-amide hydrochloride	570.17	98% (LC/MS)
423	CIH THO	N-[3-[2-(4-Methoxy-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(4- methoxy-phenyl)-propyl]- propionamide hydrochloride	530.105	98% (LC/MS)
424	N CIH D	Cyclohexanecarboxylic acid [3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-amide hydrochloride	632.261	98% (LC/MS)
425	N CIH	Cyclopentanecarboxylic acid [1-(3-methoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	577.593	98% (LC/MS)
426	O CIH H	N-[1-(3-Methoxy-phenyl)-3-(1-oxo- 2-pyridin-3-ylmethyl-2,8-diaza- spiro[4.5]dec-8-yl)-propyl]- propionamide dihydrochloride	537.528	98% (LC/MS)
427	N CIH	2-Methoxy-N-[1-(3-methoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-acetamide dihydrochloride	553.527	98% (LC/MS)

428	OBhiral N N N N N N N N N N N N N N N N N N N	3-Hydroxy-cyclopentanecarboxylic acid {(S)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenylpropyl}-amide	567.747	90% (HPLC)
429	Odhiral	3-Hydroxy-cyclopentanecarboxylic acid [(S)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide	490.644	97% (HPLC)
430	N N NH NH CI	Cyclopropanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	546.535	98% (LC/MS)
431	N HCI NH	N-{1-(2-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride	548.551	98% (LC/MS)
432	N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-	Cyclobutanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	560.562	98% (LC/MS)
433	N HCi NH	Cyclopentanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	574.589	98% (LC/MS)
434	N HCI NH	N-{1-(2-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-propionamide hydrochloride	534.524	98% (LC/MS)

435	NH HCI CI	N-{1-(2-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2-methoxy-acetamide hydrochloride	550.523	98% (LC/MS)
436	N HGI NH	Cyclohexanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	588.616	98% (LC/MS)
437	O NHCI NH	Cyclopropanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	594.6	98% (LC/MS)
438	NH HCI NH CI	N-{1-(2-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride	596.616	98% (LC/MS)
439	N HCI NH	Cyclobutanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	608.627	98% (LC/MS)
440	N HCI NH CI CI	Cyclopentanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	622.654	98% (LC/MS)
441	N HCI NH	N-{1-(2-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]- propyl}-propionamide hydrochloride	582.589	98% (LC/MS)

442	N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-	N-{1-(2-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2-methoxy-acetamide hydrochloride	598.588	98% (LC/MS)
443	N N NH HCI NH	Cyclohexanecarboxylic acid {1-(2-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	636.681	98% (LC/MS)
444	N HCI CI	Cyclopropanecarboxylic acid [1-(2-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	553.958	98% (LC/MS)
445	N HCI CI	N-[1-(2-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-isobutyramide dihydrochloride	555.974	98% (LC/MS)
446	N HCI CI	Cyclobutanecarboxylic acid [1-(2-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	567.985	98% (LC/MS)
447	N HCI CI	Cyclopentanecarboxylic acid [1-(2-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	582.012	98% (LC/MS)
448	N HCI CI	N-[1-(2-Chloro-phenyl)-3-(1-oxo-2- pyridin-3-ylmethyl-2,8-diaza- spiro[4.5]dec-8-yl)-propyl]- propionamide dihydrochloride	541.948	98% (LC/MS)

449	N HCI CI	N-[1-(2-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-2-methoxy-acetamide dihydrochloride	557.946	93.6% (LC/MS)
450	N HCI CI	Cyclohexanecarboxylic acid [1-(2-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	596.039	98+ (LC/MS)
451	HCI HCI	Cyclopropanecarboxylic acid {1-(4-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	546.535	98% (LC/MS)
452	N HGI NH	N-{1-(4-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride	548.551	98% (LC/MS)
453	N N NH HCi NH	Cyclobutanecarboxylic acid {1-(4-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	560.562	98% (LC/MS)
<b>454</b>	N HCI NH	Cyclopentanecarboxylic acid {1-(4-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	574.589	98% (LC/MS)
455	N HCI NH	N-{1-(4-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-propionamide hydrochloride	534.524	98% (LC/MS)

456	N-N-NH HCI NH	N-{1-(4-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2-methoxy-acetamide hydrochloride	550.523	98% (LC/MS)
457	NH HCI NH	Cyclohexanecarboxylic acid {1-(4-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	588.616	98% (LC/MS)
458	NH HCI NH Ci	N-{1-(4-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-propionamide hydrochloride	582.589	98% (LC/MS)
459	N HCI NH	N-{1-(4-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-2-methoxy-acetamide hydrochloride	598.588	98% (LC/MS)
460	N HCI NH	Cyclohexanecarboxylic acid {1-(4-chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	636.681	98% (LC/MS)
461	N HCI NH	Cyclopropanecarboxylic acid [1-(4-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	553.958	98% (LC/MS)
462	N- NH HCI NH	N-[1-(4-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-isobutyramide dihydrochloride	555.974	98% (LC/MS)

463	N HCI NH	Cyclobutanecarboxylic acid [1-(4-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	567.985	98% (LC/MS)
464	N HCI NH	Cyclopentanecarboxylic acid [1-(4-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	582.012	95% (LC/MS)
465	N HCI NH	N-[1-(4-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-propionamide dihydrochloride	541.948	93.5% (LC/MS)
466	N HCI NH	N-[1-(4-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-2-methoxy-acetamide dihydrochloride	557.946	98% (LC/MS)
467	N HCI NH CI	Cyclohexanecarboxylic acid [1-(4-chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	596.039	94.4% (LC/MS)
468	N NH HCI NH	Cyclopropanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-chloro-phenyl)-propyl]-amide hydrochloride	595.406	98% (LC/MS)
469	N HCI NH	Cyclopropanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-chloro-phenyl)-propyl]-amide hydrochloride	595.406	98% (LC/MS)

470	N HCI NH	Cyclopropanecarboxylic acid {1-(3,4-dichloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	580.98	98% (LC/MS)
471	NH HCI NH	Cyclopropanecarboxylic acid {1-(3,4-dichloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	629.045	98% (LC/MS)
472	N HCI NH CI CI	Cyclopropanecarboxylic acid [1-(3,4-dichloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	588.404	98% (LC/MS)
473 <sup>°</sup>	N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-	Cyclopentanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-(2-chloro-phenyl)-propyl]-amide hydrochloride	623.459	98% (LC/MS)
474	N-O-NH HCI -NH CI	Cyclopentanecarboxylic acid [3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-chloro-phenyl)-propyl]-amide hydrochloride	623.459	98% (LC/MS)
475	HCI H	Cyclopentanecarboxylic acid {(S)-3-[2-(4-fluoro-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	528.108	98% (LC/MS)
476	Chiral N HCI	Cyclopentanecarboxylic acid {(S)-3-[2-(4-chloro-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	544.563	98% (LC/MS)

477	Hei	Chiral	Cyclopentanecarboxylic acid {(S)-3-[2-(4-cyano-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	535.128	98% (LC/MS)
478	N HCI H	Chiral	Cyclopentanecarboxylic acid {(S)-3-[2-(4-difluoromethoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	576.124	98% (LC/MS)
479	HCI H	Chiral	Cyclopentanecarboxylic acid {(S)-3-[1-oxo-2-(4-trifluoromethoxy-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	594.114	98% (LC/MS)
480	N HCI II	Chiral	Cyclopentanecarboxylic acid {(S)-3-[2-(4-methylsulfanyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	556.211	98% (LC/MS)
481		Chiral	Cyclopentanecarboxylic acid {(S)-3-[1-oxo-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	576.181	98% (LC/MS)
482	N HCI H	Chiral	Cyclopentanecarboxylic acid [(S)-3-(2-isobutyl-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide hydrochloride	476.101	95% (LC/MS)
483	PICI H	Chiral	Cyclopentanecarboxylic acid {(S)-3-[2-(4-methanesulfon,:-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	588.209	98% (LC/MS)

484	Chiral N HCI N	Cyclopentanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	540.144	98% (LC/MS)
485	HCI H	Cyclopropanecarboxylic acid {(S)-3-[2-(4-fluoro-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	500.055	98% (LC/MS)
486	N HCI N HCI	Cyclopropanecarboxylic acid {(S)-3-[2-(4-chloro-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	516.51	98% (LC/MS)
487	Chiral N HCI N Chiral	Cyclopropanecarboxylic acid {(S)-3-[2-(4-cyano-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	507.074	98% (LC/MS)
488	HCI HCO Chiral	Cyclopropanecarboxylic acid {(S)-3-[2-(4-difluoromethoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	548.07	98% (LC/MS)
489	N-HCI H	Cyclopropanecarboxylic acid {(S)-3-[1-oxo-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	548.127	98% (LC/MS)
490	HCI HCI Chiral	Cyclopropanecarboxylic acid [(S)-3-(2-cyclohexylmethyl-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide hydrochloride	488.112	99% (LC/MS)

491	HCI HCI Chiral	Cyclopropanecarboxylic acid [(S)-3-(2-isobutyl-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-amide hydrochloride	448.047	98% (LC/MS)
492	Chiral	Cyclopropanecarboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	560.155	98% (LC/MS)
493	O NHCI H	Cyclopropanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	512.09	98% (LC/MS)
494	HCI H Chiral	N-[(S)-3-(2-Benzyl-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-isobutyramide hydrochloride	484.08	95% (LC/MS)
495	HCI HOO Chiral	N-{(S)-3-[2-(4-Fluoro-benzyl)-1- oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1- phenyl-propyl}-isobutyramide hydrochloride	502.07	90% (LC/MS)
496	HC1 HC1 Chiral	Cyclopropanecarboxylic acid {(S)-3-[1-oxo-2-(4-trifluoromethoxy-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	566.06	98% (LC/MS)
497	HCI N-Chiral	Cyclopropanecarboxylic acid {(S)-3-[2-(4-methylsulfanyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	528.157	98% (LC/MS)

498	HCI H	N-{(S)-3-[2-(4-Chloro-benzyl)-1- oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1- phenyl-propyl}-isobutyramide hydrochloride	518.525	95% (LC/MS)
499	CI Chiral	N-{(S)-3-[2-(4-Cyano-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride	509.09	98% (LC/MS)
500	Chiral NHCI	N-{(S)-3-[2-(4-Difluoromethoxy- benzyl)-1-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-phenyl- propyl}-isobutyramide hydrochloride	550.086	90% (LC/MS)
501	Chiral N-Chiral	N-{(S)-3-[1-Oxo-2-(4-trifluoromethoxy-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride	568.076	91.3% (LC/MS)
502	Chiral	N-((S)-3-[2-(4-Methylsulfanyl- benzyl)-1-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-phenyl- propyl}-isobutyramide hydrochloride	530.173	90% (LC/MS)
503	O NHCI NHCI NHCI NHCI NHCI NHCI NHCI NHCI	N-{(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride	514.106	95% (LC/MS)
504	Chiral Chiral	2-Methoxy-cyclopent-1- enecarboxylic acid {(S)-3-[2-(4- methanesulfonyl-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1- phenyl-propyl}-amide	579.758	87% (HPLC)

505	Chiral	2-Methoxy-cyclopent-1- enecarboxylic acid [(S)-3-(1-oxo-2- pyridin-3-ylmethyl-2,8-diaza- spiro[4.5]dec-8-yl)-1-phenyl- propyl]-amide	502.655	84% (HPLC)
506	HCI CI CI	Cyclopentanecarboxylic acid {1- (3,4-dichloro-phenyl)-3-[2-(4- methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	609.034	98% (LC/MS)
507	NHCI H	Cyclopentanecarboxylic acid {1-(3,4-dichloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	657.099	98% (LC/MS)
508	N HCI N HCI CI CI	Cyclopentanecarboxylic acid [1-(3,4-dichloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diazaspiro[4.5]dec-8-yl)-propyl]-amide dihydrochloride	616.457	98% (LC/MS)
509	HCI HCI	N-{(S)-3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-propionamide hydrochloride	500.09	100% (LC/MS)
510	HCI HC	N-{(S)-3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2,2-dimethyl-propionamide hydrochloride	528.14	100% (LC/MS)
511	HCI HCS	Thiophene-2-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochlcride	554.16	100% (LC/MS)

512	HCI HCI	Thiophene-3-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	554.16	100% (LC/MS)
513	HCI HCI	(R)-Tetrahydro-furan-2-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	542.12	100% (LC/MS)
514	HCI HCI	(S)-Tetrahydro-furan-2-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	542.12	100% (LC/MS)
515	HCI HCI	Tetrahydro-furan-3-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	542.12	100% (LC/MS)
516	HCI HCI	3-Oxo-cyclopentanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	554.13	100% (LC/MS)
517	HCI HCI	4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	590.16	100% (LC/MS)
518	HCI HCI	Tetrahydro-pyran-4-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	557.14	100% (LC/MS)

519	HCI NEW HCI	4,6-Dimethyl-pyrimidine-5-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide trihydrochloride	651.08	100% (LC/MS)
520	HCI H	Adamantane-1-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	606.25	90% (LC/MS)
521	OS HCI HCI H	N-{(S)-3-[2-(4-Methanesulfonyl- benzyl)-1-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-phenyl- propyl}-propionamide hydrochloride	548.15	96% (LC/MS)
522	O=S HCI HCI	N-{(S)-3-[2-(4-Methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2,2-dimethyl-propionamide hydrochloride	576.2	100% (LC/MS)
523	O=S HCI HCI HCS	Thiophene-2-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	602.22	100% (LC/MS)
524	O=S ON N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N	Thiophene-3-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	602.22	100% (LC/MS)
525	O-IS HOU HOU TO	4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	638.22	100% (LC/MS)

526	Ozd HCI	Tetrahydro-pyran-4-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	603.82	100% (LC/MS)
527	O.S. HCI HCI HCI	N-{(S)-3-[2-(4-Methanesulfonyl- benzyl)-1-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-phenyl- propyl}-nicotinamide dihydrochloride	633.64	100% (LC/MS)
528	OS HCI HCI HCI	Pyrimidine-5-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide trihydrochloride	671.09	100% (LC/MS)
529	HCI HCI HCI	4,6-Dimethyl-pyrimidine-5-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide trihydrochloride	699.14	90% (LC/MS)
530	O=C	Adamantane-1-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	654.32	100% (LC/MS)
531	HCI H	N-{(S)-3-[2-(4-Ethoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride	528.14	100% (LC/MS)
532	Ha Ha	Cyclopropanecarboxylic acid {(S)-3-[2-(4-ethoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	526.12	100% (LC/MS)

4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide 590.16 hydrochloride

100% (LC/MS)

2-Cyclopropyl-N-{(S)-3-[2-(4methanesulfonyl-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-acetamide hydrochloride

100% 574.19 (LC/MS)

4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-(4-methanesulfonylbenzyl)-3-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenylpropyl}-amide hydrochloride

100% 638.22 (LC/MS)

Scheme 5.

# Example 9.N-{3-[2-(4-Bromobenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenylpropyl}-

10 benzenesulfonamide hydrochloride (Compound 536)

To 83 mg (100  $\mu$ mol, loading of 1.2 mmol/g) of benzenesulfonate activated ester on polymeric 4-hydroxy-2,3,5,6-tetrafluorobenzamido (TFP) resin (see preparation in J.M. Salvino et al. J. Comb.

- 5 Chem. 2000, 2, 691-697), preswollen with 0.5 mL of anhydrous DMF, was added 27.3 mg (60 μmol) of 8-(3-amino-3-phenylpropyl)-2-(4-bromobenzyl)-2,8-diaza-spiro[4.5]decan-1-one diluted in 1 mL of DMF. The reaction was agitated overnight at room temperature.
- The mixture was filtered and washed with DCM (2 x 2 mL). The filtrates were collected and evaporated in vacuo. The crude was purified by semi-preparative HPLC (method A) yielding 10.6 mg (27.9%) of Compound 536 as a colorless solid.
- 15  $^{1}$ H NMR (400 MHz, DMSO- $d_{6}$ ):  $\delta$  [ppm] 9.64 (br s, 1H), 8.44 (d, 1H), 7.53 (m, 4H), 7.44 (t, 1H), 7.35 (m, 2H), 7.12 (m, 7H), 4.33 (m, 3H), 3.35 (m, 2H), 3.16 (t, 3H), 3.05 (m, 1H), 2.9 (m, 2H), 2.08 (m, 1H), 1.95 (m, 4H), 1.82 (m, 1H), 1.56 (br d, 2H).
- 20 LC/MS: m/z 598.1 (MH<sup>+</sup>).

Table 4 of compounds illustrates some of the compounds of the present invention that were synthesized using the procedure described in scheme 5.

Table 4.

CPD MOLSTRUCTURE

COMPOUND NAME

MOLWT PURITY

Propane-2-sulfonic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

550.16 100% (LC/MS)

Propane-2-sulfonic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

598.23 90% (LC/MS)

5 Scheme 6.

# Example 10. 1-{3-[2-(4-Bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-phenyl-urea hydrochloride (Compound 542)

10

To 27.3 mg (60  $\mu$ mol) of 8-(3-amino-3-phenylpropyl)-2-(4-bromobenzyl)-2,8-diaza-spiro[4.5]decan-1-one, diluted in 1 mL of anhydrous THF, was added 9.66 mg

(80 μmol) of phenylisocyanate dissolved in 0.5 mL of anhydrous THF. The reaction mixture was agitated overnight at room temperature and evaporated in vacuo. The crude was purified by semi-preparative 5 HPLC (method C) yielding 18.9 mg (51.5%) of Compound 542 as a pale yellow solid.

<sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ): δ [ppm] 9.45 (br s, 1H), 8.64 (d, 1H), 7.51 (d, 2H), 7.37 (m, 6H), 7.28 (m, 1H), 7.21-7.13 (m, 4H), 6.93 (d, 1H), 6.87 (t x t, 10 1H), 4.8 (m, 1H), 4.33 (s, 2H), 3.48 (br t, 2H), 3.18-2.94 (m, 5H), 2.15 (m, 2H), 1.96 (m, 4H), 1.83 (m, 1H), 1.6 (br d, 2H).

Table 5 of compounds illustrates some of the

15 compounds of the present invention that were synthesized using the procedure described in scheme 6.

#### Table 5.

CPD #	MOLSTRUCTURE	COMPOUND NAME	MOLWT	PURITY
539	Br O N	Piperidine-1-carboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	604.03	93.5% (LC/MS)
540	CH, HOI ON N	Piperidine-1-carboxylic acid {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	555.17	94.5% (LC/MS)

Piperidine-1-carboxylic acid {3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}amide hydrochloride 93.3% 541 603.224 (LC/MS) 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-phenyl-urea hydrochloride 98+ 612.008 542 (LC/MS) 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-(2-chloro-phenyl)-urea hydrochloride 94.6% 543 646.453 (LC/MS) 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-(2-methoxy-phenyl)-urea hydrochloride 98+ 544 642.034 (LC/MS) 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-(3-chloro-phenyl)-urea hydrochloride 98+ 545 646.453 (LC/MS)

1-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-(3-methoxy-phenyl)-urea hydrochloride 98+ 546 642.034 (LC/MS) 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-(4-chloro-phenyl)-urea hydrochloride 98+ 547 646.453 (LC/MS) 1-{3-{2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-(4-methoxy-phenyl)-urea hydrochloride 98+ 548 642.034 (LC/MS) 1-{3-[2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-(2,6-dimethyl-phenyl)-urea hydrochloride 98+ 549 640.062 (LC/MS) 1-{3-{2-(4-bromobenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-naphthalen-1-yl-urea hydrochloride 98+ 550 662.068 (LC/MS)

1-{3-{2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-3-phenyl-urea hydrochloride 98+ 563.138 551 (LC/MS) 1-(2-chlorophenyl)-3-{3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}urea hydrochloride 95+ 552 597.583 (LC/MS) 1-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-3-(2-methoxyphenyl)urea hydrochloride 98+ 553 593.164 (LC/MS) 1-(3-chlorophenyl)-3-{3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}urea hydrochloride 98+ 554 597.583 (LC/MS) 1-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-3-(3-methoxyphenyl)urea hydrochloride 98+ 555 593.164 (LC/MS)

-{3-{2-(4-methoxybenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-3-(4-methoxyphenyl)-urea hydrochloride 98+ 556 593.164 (LC/MS) 1-(2,6-dimethylphenyl)-3-{3-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}urea hydrochloride 98+ 557 591.192 (LC/MS) 1-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-3-naphthalen-1-ylurea hydrochloride 98+ 558 613.198 (LC/MS) 1-{3-[2-(4-methanesulfonylbenzyl)-1oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-3-phenyl-urea hydrochloride 98+ 559 611.203 (LC/MS) 1-(2-chlorophenyl)-3-{3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-urea hydrochloride 98+ 560 645.648 (LC/MS)

1-{3-[2-(4-methanesulfonylbenzyl)-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-3-(2-methoxyphenyl)urea hydrochloride 561 641.229 1-(3-chlorophenyl)-3-{3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-urea hydrochloride 562 645.648 1-{3-[2-(4-methanesulfonylbenzyl)-1oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-3-(3-methoxyphenyl)urea hydrochloride 563 1-(4-chlorophenyl)-3-{3-[2-(4methanesulfonylbenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-urea hydrochloride 564 645.648 1-{3-[2-(4-methanesulfonylbenzyl)-1oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-3-(4-methoxyphenyl)-

98+

(LC/MS)

98+

(LC/MS)

98+

(LC/MS)

98+

(LC/MS)

98+

(LC/MS)

641.229

urea hydrochloride

565

1-(2,6-dimethylphenyl)-3-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-urea hydrochloride

639.257 98+ (LC/MS)

1-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-naphthalen-1-ylurea hydrochloride

661.263 98+ (LC/MS)

Table 5a of compounds illustrates some additional compounds of the present invention that were synthesized using the procedure described in scheme 6.

Table 5a.

5

CPD #	MOLSTRUCTURE	COMPOUND NAME	MOLWT	PURITY
568	HCI HCI N	Morpholine-4-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	557.14	100% (LC/MS)
569	O, O HCI HCI HCI	Morpholine-4-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	605.2	90% (LC/MS)

3,3-Difluoro-pyrrolidine-1-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride

577.12 100% (LC/MS)

3,3-Difluoro-pyrrolidine-1-carboxylic acid {(S)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}- 625.18 (LC/MS)

5 Scheme 7.

# Example 11. {3-[2-(4-Methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenylpropyl}-carbamic acid methyl ester hydrochloride (Compound

## 10 **572)**

To a stirred solution of 8-(3-amino-3-phenylpropyl)-2-(4-methanesulfonylbenzyl)-2,8-diaza-spiro[4.5]decan-1-one (27.3 mg, 0.06 mmol) in DMF-DCE (1:1, 1.0 mL) was sequentially added triethylamine (0.01 mL, 0.072 mmol) and dimethyldicarbonate (0.07 mL, 0.066 mmol). The

reaction mixture was stirred overnight at room temperature, concentrated and purified by semi-preparative HPLC (method D) affording **Compound 572** (17.2 mg, 52%) as a white powder.

5 <sup>1</sup>H NMR (400 MHz, DMSO-d<sub>6</sub>): δ [ppm] 9.62 (br s, 1H), 7.88 (d, 2H), 7.44 (d, 2H), 7.33 (m, 4H), 7.25 (m, 1H), 4.59 (m, 1H), 4.47 (s, 2H), 3.50 (s, 3H), 3.42 (m, 2H), 3.22 (t, 2H), 3.19 (s, 3H), 3.09-2.91 (m, 4H), 2.12-1.95 (m, 6H), 1.86 (t, 1H), 1.64 (br d, 10 2H).

LC/MS: m/z 513.6  $(MH^{+})$ .

Table 6 of compounds illustrates some of the compounds of the present invention that were synthesized using the procedure described in scheme 7.

20 Table 6.

CPD #	MOLSTRUCTURE	COMPOUND NAME	MOLWT	PURITY
572	S HCI HCI	{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid methyl ester hydrochloride	550.116	98+ (LC/MS)
573	O HCI HCI	{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid ethyl ester hydrochloride	564.143	98+ (LC/MS)

Table 6a of compounds illustrates some additional compounds of the present invention that were synthesized using the procedure described in scheme 7.

5

Table 6a.

CPD #	MOLSTRUCTURE	COMPOUND NAME	MOLWT	PURITY
574		{3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-carbamic acid cyclohexyl ester	582.77	83% (LC/MS)
575	Chirel	{(S)-3-[2-(4-Methanesulfonyl- benzyl)-1-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-phenyl- propyl}-carbamic acid cyclohexyl ester	581.78	99% (LC/MS)
576	Chiral N Chiral	{(S)-3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid cyclobutyl ester	553.73	99% (LC/MS)
577	Chirat	{(S)-3-[2-(4-Methanesulfonyl- benzyl)-1-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-phenyl- propyl}-carbamic acid cyclopentyl ester	567.75	99% (LC/MS)
578	Chiral	[(S)-3-(1-Oxo-2-pyridin 3 ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-carbamic acid cyclobutyl ester	476.62	98% (LC/MS)

579	Chiral	[(S)-3-(1-Oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-carbamic acid cyclopentyl ester	490.65	99% (LC/MS)
580	Chiral	[(S)-3-(1-Oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-carbamic acid 1-methyl-cyclopentyl ester	504.68	97% (LC/MS)
581	Chiral	[(S)-3-(1-Oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-carbamic acid cyclohexyl ester	504.68	100% (LC/MS)
582	HCI H O	{3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid ethyl ester hydrochloride	570.98	98+ (LC/MS)
583	N-HCI H-O	{3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid ethyl ester hydrochloride	522.11	98+ (LC/MS)
584	N HCI NON S	[3-(1-Oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-carbamic acid ethyl ester dihydrochloride	529.53	98+ (LC/MS)
585	N-HCI H	{1-(2-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid ethyl ester hydrochloride	550.52	98+ (LC/MS)

586	N HCI H-O	{1-(2-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid ethyl ester hydrochloride	598.59	98+ (LC/MS)
587	HCI HCI HCI HCI N	[1-(2-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid ethyl ester dihydrochloride	557.95	98+ (LC/MS)
588	HCI HOO CI	[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chloro-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride	599.4	98+ (LC/MS)
589	HCI HCI CO	{1-(3-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid ethyl ester hydrochloride	550.52	98+ (LC/MS)
590	N HCI H O	{1-(3-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid ethyl ester hydrochloride	598.59	98+ (LC/MS)
591	HCI HO	[1-(3-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid ethyl ester dihydrochloride	557.95	98+ (LC/MS)
592	HCI H	{1-(4-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid ethyl ester hydrochloride	550.52	98+ (LC/MS)

593	HCI HOO CI	[1-(4-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid ethyl ester dihydrochloride	557.95	98+ (LC/MS)
594	Br HCI HOO	{3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid methyl ester hydrochloride	556.95	98+ (LC/MS)
595	HCI HOO	{3-[2-(4-Methoxy-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1- thiophen-2-yl-propyl}-carbamic acid methyl ester hydrochloride	508.08	98+ (LC/MS)
596	NHCI HOO-	{3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic acid methyl ester hydrochloride	556.14	98+ (LC/MS)
597	HCI HCI S	[3-(1-Oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-carbamic acid methyl ester dihydrochloride	515.5	98+ (LC/MS)
598	N HCI H-O-	{1-(2-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl esterhydrochloride	536.5	98+ (LC/MS)
599	N HCI N CI	{1-(2-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride	584.56	98+ (LC/MS)

600	N HCI HO	[1-(2-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid methyl ester dihydrochloride	543.92	98+ (LC/MS)
601	N HCI H O CI	[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-chloro-phenyl)-propyl]-carbamic acid methyl ester hydrochloride	585.37	98+ (LC/MS)
602	N HCI HOO	{1-(3-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride	536.5	98+ (LC/MS)
603	CIH N	{3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-carbamic acid ethyl ester hydrochloride	602.41	98% (LC/MS)
604	CIH N	{3-[2-(4-Methoxy-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1- pyridin-2-yl-propyl}-carbamic acid ethyl ester dihydrochloride	553.53	98% (LC/MS)
605	CIH N	[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride	594.99	98% (LC/MS)
606	CIH N-	[3-[2-(4-Methoxy-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(4- methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride	546.11	98% (LC/MS) <sub>_</sub>

607	CIH H	[3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl}-carbamic acid ethyl ester hydrochloride	594.17	98% (LC/MS)
608	CIH NO	[1-(4-Methoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid ethyl ester dihydrochloride	553.53 <sub>.</sub>	98% (LC/MS)
609	CIH H	[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3,4-dimethoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride	625.01	98% (LC/MS)
610	CIH	{1-(3,4-Dimethoxy-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid ethyl ester hydrochloride	576.14	98% (LC/MS)
611	CIH CH	{1-(3,4-Dimethoxy-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid ethyl ester hydrochloride	624.2	98% (LC/MS)
612	CIH NO	[1-(3,4-Dimethoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid ethyl ester dihydrochloride	583.56	98% (LC/MS)
613	CIH N	[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride	594.99	98% (LC/MS)

614	CIH H	[3-[2-(4-Methoxy-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(3- methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride	546.11	98% (LC/MS)
615	CIH HOO	[3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride	594.17	98% (LC/MS)
616	CIH H-O-/	[1-(3-Methoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid ethyl ester dihydrochloride	553.53	98% (LC/MS)
617	CIH II O	[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride	580.96	98% (LC/MS)
618	N N N N N N N N N N N N N N N N N N N	[3-[2-(4-Methoxy-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(4- methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride	532.08	98% (LC/MS)
619	CIH HOO	[3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(4-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride	580.15	98% (LC/MS)
620	CIH H-O-	[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3,4-dimethoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride	610.99	98% (LC/MS)

621	CIH HOO-	{1-(3,4-Dimethoxy-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride	562.11	98% (LC/MS)
622	CIH HO-	{1-(3,4-Dimethoxy-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride	610.17	98% (LC/MS)
623	CIH HOO	[1-(3,4-Dimethoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid methyl ester dihydrochloride	569.53	98% (LC/MS)
624	CIH HO-	[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride	580.96	98% (LC/MS)
625	CIH HOO-	[3-[2-(4-Methoxy-benzyl)-1-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1-(3- methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride	532.08	98% (LC/MS)
<b>626</b>	CIH H-O-	[3-[2-(4-Methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(3-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride	580.15	98% (LC/MS)
627	NCIH HO-	[1-(3-Methoxy-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid methyl ester dihydrochloride	539.51	98% (LC/MS)

628	HCI H-O-O-O-O-O-O-O-O-O-O-O-O-O-O-O-O-O-O-O	{1-(3-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride	584.56	98+ (LC/MS)
629	HCI HCI O	[1-(3-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid methyl ester dihydrochloride	543.92	98+ (LC/MS)
630	HCI HOO CI	{1-(4-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride	536.5	98+ (LC/MS)
631	N HCI HOO	{1-(4-Chloro-phenyl)-3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid methyl ester hydrochloride	584.56	98+ (LC/MS)
632	HCI HOO CI	[1-(4-Chloro-phenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid methyl ester dihydrochloride	543.92	.98+ (LC/MS)
633	CIH H O-	[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-carbamic acid methyl ester hydrochloride	580.96	98+ (LC/MS)
634	Br CiH H O	[3-[2-(4-Bromo-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-carbamic acid ethyl ester hydrochloride	594.99	98+ (LC/MS)

[3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2methoxy-phenyl)-propyl]-carbamic 98+ acid methyl ester hydrochloride 635 532.08 (LC/MS) [3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2methoxy-phenyl)-propyl]-carbamic 98+ acid ethyl ester hydrochloride 636 546.11 (LC/MS) [3-[2-(4-Methanesulfonyl-benzyl)-1oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-98+ carbamic acid methyl ester 637 580.15 (LC/MS) hydrochloride [3-[2-(4-Methanesulfonyl-benzyl)-1oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-98+ carbamic acid ethyl ester 638 594.17 (LC/MS) hydrochloride Base, DMF or Y or Z = COY or Z = CONaBH(OAc)<sub>3</sub>, DCE or WCOCI or WCOOH

Scheme 8.

### Preparation 10

8-(3,3-Diphenylpropyl)-2,8-diaza-spiro[4.5]decan-1-one

To a mixture of 1.49 g (7.8 mmol) of 2,8-diazaspiro[4.5]decan-1-one hydrochloride, 2.39 g (8.6
mmol) of 3,3-diphenylpropyl bromide and 3.23 g (23.4
mmol) of potassium carbonate was added 40 mL of
anhydrous DMF. The reaction mixture was stirred for
8 hours at 60°C. Then 10 mL of water was added and
the solution was extracted with DCM (2 x 100 mL).
The combined organic layers were dried over sodium
sulfate, filtered and evaporated in vacuo. The
yellow crude oil was purified by flash
chromatography on silica gel (DCM/methanol 100:0 to
90:10) and 8-(3,3-diphenylpropyl)-2,8-diazaspiro[4.5]decan-1-one was isolated as a pale yellow
solid (1.22 g, 44.9%).

<sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  [ppm] 7.49 (br s, 1H), 7.3-7.22 (m, 8H), 7.13 (m, 2H), 3.97 (t, 1H), 3.09 (t, 2H), 2.67 (m, 2H), 2.13 (m, 4H), 1.86 (m, 4H), 1.63 (t x d, 2H), 1.25 (br d, 2H).

25

#### Preparation 11

8-(3,3-Diphenylpropyl)-2,8-diaza-spiro[4.5]decane

400 mg (1.14 mmol) of 8-(3,3-diphenylpropyl)-2,8-diaza-spiro[4.5]decan-1-one were dissolved in 15 mL of anhydrous THF followed by 3.44 mL of a 1M solution of LAH in THF. The reaction mixture was

- refluxed for 5 hours and cooled. 5 mL of water and 10 mL of aqueous solution of sodium hydroxide (1N) were successively added and the solution was stirred for an additional one hour before filtering on
- 10 celite. The filtrate was extracted with DCM (2 x 10 mL). The organic layers were dried over sodium sulfate, filtered and evaporated *in vacuo* to yield 8-(3,3-diphenylpropyl)-2,8-diaza-spiro[4.5]decane as a yellow oil (365.1 mg, 95.7%).
- 15 <sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  [ppm] 7.29-7.22 (m, 8H), 7.12 (m, 2H), 3.95 (t, 1H), 3.34 (br s, 1H), 2.72 (t, 2H), 2.46 (s, 2H), 2.24-2.07 (m, 8H), 1.38 (m, 6H).

### Example 12. (4-Bromophenyl) - [8-(3,3-diphenylpropyl) - 2,8-diaza-spiro[4.5]dec-2-yl]-methanone

#### hydrochloride

#### (Compound 639)

5

To 100 mg (100  $\mu$ mol, loading of 1 mmol/g) of 4-bromophenylcarboxyl activated ester on polymeric 4-hydroxy-2,3,5,6-tetrafluorobenzamido (TFP) resin (see preparation in J.M. Salvino et al. J. Comb.

10 Chem. 2000, 2, 691-697), preswollen with 0.5 mL of anhydrous DMF, was added 20 mg (60 μmol) of 8-(3,3-diphenylpropyl)-2,8-diaza-spiro[4.5]decane diluted in 1 mL of DMF. The reaction was agitated overnight at room temperature. The mixture was filtered and washed with DCM (2 x 2 mL). The filtrates were

collected and evaporated *in vacuo*. The crude was purified by semi-preparative HPLC (method B) yielding **Compound 639** as a colorless solid (9.8 mg, 29.5%).

20 <sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ): δ [ppm] 9.9 (br s, 1H), 7.61 (d, 2H), 7.47 (d x d, 1H), 7.43 (d, 1H), 7.3 (m, 8H), 7.18 (t, 2H), 3.96 (t, 1H), 3.52-3.28 (m, 8H), 2.94 (m, 3H), 2.79 (m, 1H), 1.89-1.63 (m, 6H). LC/MS: m/z 519.0 (MH $^+$ ).

W X N Z NH HCI Br R<sub>2</sub> W X N Z N O Alkyl KOH R<sub>2</sub> W X N Z N O Alkyl KOH R<sub>2</sub> 
$$R_2$$
  $R_2$   $R_3$   $R_4$   $R_5$   $R_5$   $R_7$   $R_7$   $R_8$ 

Scheme 9.

# 5 Example 13. 4-[2-(4-Bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyric acid methyl ester

#### (Compound 640)

- 10 To a mixture of 500 mg (1.39 mmol) of 2-(4-bromobenzyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride in 10 mL of anhydrous DMF was added 484  $\mu$ L (2.78 mmol) of DIPEA followed by a solution of 4-bromo-2-phenyl-butyric acid methyl ester (357)
- 15 mg, 1.39 mmol) in 4 mL of anhydrous DMF. Then 576 mg (4.17 mmol) of potassium carbonate were added and the reaction mixture was stirred overnight at 60°C. After cooling, the mixture was poured in water and extracted with ethyl acetate. The combined organic
- 20 layers were washed with brine and dried over sodium sulfate. The crude was purified by flash

chromatography on silica gel, eluting with ethyl acetate and DCM/methanol (9:1), and yielding 555 mg of **Compound 640** as a colorless oil (80%).

<sup>1</sup>H NMR (400 MHz, CD<sub>2</sub>Cl<sub>2</sub>): δ [ppm] 7.47 (d, 2H), 7.34-5 7.24 (m, 5H), 7.11 (d, 2H), 4.38 (s, 2H), 3.73 (m, 1H), 3.66 (s, 3H), 3.13 (t, 2H), 2.85 (m, 1H), 2.72 (m, 1H), 2.35-2.24 (m, 3H), 2.07-1.81 (m, 7H), 1.37 (br d, 2H).

#### 10 Preparation 12

4-[2-(4-Bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyric acid

To a mixture of 521 mg (1.043 mmol) of 4-[2-(4-

- bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2phenyl-butyric acid methyl ester in 10 mL of
  methanol was added 101 mg (1.56 mmol) of potassium
  hydroxide in 5 mL of water. The reaction mixture was
  refluxed for 5 hours, cooled to room temperature,
- 20 diluted with water (10 mL) and treated with concentrated acetic acid. The mixture was stirred for 30 minutes and left at room temperature to allow crystallisation. 4-[2-(4-Bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyric acid was
- 25 collected as a white solid (390 mg, 77%) by filtration.

<sup>1</sup>H NMR (400 MHz, DMSO- $d_6$ ): δ [ppm] 7.51 (d, 2H), 7.32-7.2 (m, 5H), 7.12 (d, 2H), 4.32 (s, 2H), 3.58 (t, 1H), 3.43 (br s, 1H), 3.12 (t, 2H), 2.77 (m, 2H), 2.3-1.99 (m, 5H), 1.83 (t, 2H), 1.73 (m, 3H), 1.33 (d, 2H).

# Example 14. 4-[2-(4-Bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-N-cyclohexyl-2-phenyl-butyramide hydrochloride (Compound 646)

. 10

To a mixture of 24.2 mg (50  $\mu$ mol) of 4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyric acid in 0.5 mL of DCE was added 6.4 mg (65  $\mu$ mol) of cyclohexylamine in 0.5 mL of DCE and

13.4 mg (65 µmol) of DCC in 0.5 mL of DCE. The reaction mixture was stirred at room temperature for 16 hours and concentrated. The crude mixture was purified by semi-preparative HPLC (method E) yielding 11.9 mg (39%) of Compound 646 as a pale

20 yellowish solid.

<sup>1</sup>H NMR (400 MHz, CD<sub>3</sub>OD): δ [ppm] 7.49 (d, 2H), 7.38–7.25 (m, 5H), 7.16 (d, 2H), 4.41 (d, 2H), 3.65–3.27 (m, 8H), 3.11–2.95 (m, 3H), 2.41 (m, 1H), 2.24–2.05 (m, 4H) 1.96–1.85 (m, 2H), 1.77–1.59 (m, 5H), 1.39–1.04 (m, 5H).

Table 7 of compounds illustrates some of the compounds of the present invention that were synthesized using the procedure described in scheme 9.

Table 7.

CPD #	MOLSTRUCTURE	COMPOUND NAME 4-[2-(4-bromobenzyl)-1-oxo-2,8-	MOLWT	PURITY
640		diaza-spiro[4.5]dec-8-yl]-2-phenyl- butyric acid methyl ester	499.446	100% (LC/MS)
641		4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyric acid methyl ester	498.641	100% (LC/MS)
642		4-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyric acid methyl ester	450.576	>90% (HNMR)
643	Br NCO ON MCO	4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2,N-diphenyl-butyramide hydrochloride	596.994	98+ (LC/MS)
644	HO HO	N-benzyl-4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride	611.02	98+ (LC/MS)

645	Br HCI O	2-(4-bromobenzyl)-8-(4-oxo-3- phenyl-4-piperidin-1-yl-butyl)-2,8- diaza-spiro[4.5]decan-1-one hydrochloride	589.014	98+ (LC/MS)
646	N N N N N N N N N N N N N N N N N N N	4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-N-cyclohexyl-2-phenyl-butyramide hydrochloride	603.041	98+ (LC/MS)
647	N CH <sub>3</sub>	4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-N-cyclohexyl-n-methyl-2-phenyl-butyramide hydrochloride	617.068	98+ (LC/MS)
648	N HCI ON N	4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-N-cyclopropyl-2-phenyl-butyramide hydrochloride	560.961	98+ (LC/MS)
649	HCJ ON	4-[2-(4-bromobenzyl)-1-cxo-2,8-diaza-spiro[4.5]dec-8-yl]-N-cyclobutyl-2-phenyl-butyramide hydrochloride	574.987	98+ (LC/MS)
650	N- CH, CH, CH,	N-cyclohexyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-n-methyl-2-phenyl-butyramide hydrochloride	616.262	98+ (LC/MS)

651	H,C-S=0	N-cyclopropyl-4-[2-(4- methanesulfonylbenzyl)-1-oxo-2,8- diaza-spiro[4.5]dec-8-yl]-2-phenyl- butyramide hydrochloride	560.155	98+ (LC/MS)
652	H <sub>C</sub> -s=0	N-cyclobutyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride	574.182	98+ (LC/MS)
653	N HCI ON	4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-N-cyclopentyl-2-phenyl-butyramide hydrochloride	589.014	98+ (LC/MS)
654	HO O H,C CH,	4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-N-isopropyl-2-phenyl-butyramide hydrochloride	562.976	98+ (LC/MS)
655	HC: 0 HC: 0 HC: 0	N-benzyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride	610.215	98+ (LC/MS)
656	HC-S=0	2-(4-methanesulfonylbenzyl)-8-(4-oxo-3-phenyl-4-piperidin-1-yl-butyl)-2,8-diaza-spiro[4.5]decan-1-one hydrochloride	588.209	98+ (LC/MS)

657	H <sub>2</sub> C-=0	N-cyclohexyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride	602.236	98+ (LC/MS)
658	H,C-S=0	N-cyclopentyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride	588.209	98+ (LC/MS)
659	H <sub>2</sub> C-S=0	N-isopropyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide hydrochloride	562.171	98+ (LC/MS)
660	HCI ON N	4-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2,N-diphenyl-butyramide hydrochloride	548.123	90.6% (LC/MS)
661	HO O	N-benzyl-4-[2-(4-methoxybenzyl)- 1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]- 2-phenyl-butyramide hydrochloride	562.15	98+ (LC/MS)
662	HCI ON HCI	2-(4-methoxybenzyl)-8-(4-oxo-3- phenyl-4-piperidin-1-yl-butyl)-2,8- diaza-spiro[4.5]decan-1-one hydrochloride	540.144	98+ (LC/MS)

N-cyclohexyl-4-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-2-phenylbutyramide hydrochloride 98+ 663 554.171 (LC/MS) N-cyclopropyl-4-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-2-phenylbutyramide hydrochloride 98+ 664 512.09 (LC/MS) N-cyclobutyl-4-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-2-phenylbutyramide hydrochloride 98+ 665 526.117 (LC/MS) N-cyclopentyl-4-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-2-phenylbutyramide hydrochloride 98+ 666 540.144 (LC/MS) N-isopropyl-4-[2-(4methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-2-phenylbutyramide hydrochloride 98+ 667 514.106 (LC/MS)

Table 8 of compounds illustrates some of the compounds of the present invention that can be synthesized using the procedure described in schemes 1-9.

5

ENGLOCIO: NIO

### 5 Table 8.

CPD #	MOLSTRUCTURE	COMPOUND NAME	MOLWT
668	HCI HCI CO	Cyclopropanecarboxylic acid {(S)-1-(3-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	546.54
669	HCI	Cyclopropanecarboxylic acid {(S)-1-(3-fluoro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	530.09
670	HCI HCI N	Cyclopropanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride	518.12
671	HCI HCI HCI S	Cyclopropanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-3-yl-propyl}-amide hydrochloride	518.12
672	HCI HC	N-{(S)-1-(3-Chloro-pher.,:)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-isobutyramide hydrochloride	548.56

673	HCI HCI F	N-{(S)-1-(3-Fluoro-phenyl)-3-[2- (4-methoxy-benzyl)-1-oxo-2,8- diaza-spiro[4.5]dec-8-yl]-propyl}- isobutyramide hydrochloride	532.1
674	HCI H	N-{(S)-3-[2-(4-Methoxy-benzyl)- 1-oxo-2,8-diaza-spiro[4.5]dec-8- yl]-1-thiophen-2-yl-propyl}- isobutyramide hydrochloride	520.14
675	HCI III	N-{(S)-3-[2-(4-Methoxy-benzyl)- 1-oxo-2,8-diaza-spiro[4.5]dec-8- yl]-1-thiophen-3-yl-propyl}- isobutyramide hydrochloride	520.14
676	CC N HCI	N-{(S)-3-[2-(4-Chloro-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide hydrochloride	518.53
677	F O HCI	N-{(S)-3-[2-(4-Fluoro-benzyl)-3- oxo-2,8-diaza-spiro[4.5]dec-8- yl]-1-phenyl-propyl}- isobutyramide hydrochloride	502.08
678	HCI HCI	N-{(S)-3-[2-(4-Cyano-benzyl)-3- oxo-2,8-diaza-spiro[4.5]dec-8- yl]-1-phenyl-propyl}- isobutyramide hydrochloride	509.1
679	HCI HC	N-{(S)-3-[2-(4-Ethoxy-benzyl)-3- oxo-2,8-diaza-spiro[4.5]dec-8- yl]-1-phenyl-propyl}- isobutyramide hydrochloride	528.14

N-{(S)-3-[2-(4-Difluoromethoxybenzyl)-3-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenylpropyl}-isobutyramide 680 550.09 hydrochloride N-{(S)-3-{3-Oxo-2-(4trifluoromethoxy-benzyl)-2,8diaza-spiro[4.5]dec-8-yl]-1phenyl-propyl}-isobutyramide hydrochloride 681 568.08 N-{(S)-3-[3-Oxo-2-(4trifluoromethyl-benzyl)-2,8-diazaspiro[4.5]dec-8-yl]-1-phenylpropyl}-isobutyramide 682 552.08 hydrochloride N-{(S)-3-[3-Oxo-2-(4-pyrazol-1yl-benzyl)-2,8-diazaspiro[4.5]dec-8-yl]-1-phenylpropyl}-isobutyramide 683 550.15 hydrochloride Cyclopropanecarboxylic acid {(S)-3-[2-(4-chloro-benzyl)-3oxo-2,8-diaza-spiro[4.5]dec-8yl]-1-phenyl-propyl}-amide 684 hydrochloride 516.52

685	F O HCI	Cyclopropanecarboxylic acid {(S)-3-[2-(4-fluoro-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	500.06
686	N O HCI H	Cyclopropanecarboxylic acid {(S)-3-[2-(4-cyano-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	507.08
687	HCI HCI	Cyclopropanecarboxylic acid {(S)-3-[2-(4-ethoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	526.12
688	F F O HCI HCI	Cyclopropanecarboxylic acid {(S)-3-[2-(4-difluoromethoxybenzyl)-3-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	548.08
689	F F P P P P P P P P P P P P P P P P P P	Cyclopropanecarboxylic acid {(S)-3-{2-(4-trifluoromethoxybenzyl)-3-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	566.07
690	F HCI HCI	Cyclopropanecarboxylic acid {(S)-3-[2-(4-trifluoromethyl-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	550.07
691	HCI HCI HCI	Cyclopropanecarboxylic acid {(S)-3-[3-oxo-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	548.13

692	HCI HCI	2-Cyclopropyl-N-{(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride	526.12
693	CL O HCI HCI HCI	N-{(S)-3-[2-(4-Chloro-benzyl)-3- oxo-2,8-diaza-spiro[4.5]dec-8- yl]-1-phenyl-propyl}-2- cyclopropyl-acetamide hydrochloride	530.54
694	F HCI HCI	N-{(S)-3-[2-(4-Fluoro-benzyl)-3- oxo-2,8-diaza-spiro[4.5]dec-8- yl]-1-phenyl-propyl}-2- cyclopropyl-acetamide hydrochloride	514.09
695	N HCI HCI	N-{(S)-3-[2-(4-Cyano-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-acetamide hydrochloride	521.11
<b>696</b>	HCI HCI	N-{(S)-3-[2-(4-Ethoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-acetamide hydrochloride	540.15
697	HCI HCI	N-{(S)-3-[2-(4-Difluoromethoxy- benzyl)-3-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-phenyl- propyl}-2-cyclopropyl-acetamide hydrochloride	562.1
698	HO HO	N-{(S)-3-[2-(4-Trifluoromethoxy- benzyl)-3-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-phenyl- propyl}-2-cyclopropyl-acetamide hydrochloride	580.09

699	F HCI HCI	N-{(S)-3-[2-(4-Trifluoromethyl- benzyl)-3-oxo-2,8-diaza- spiro[4.5]dec-8-yl]-1-phenyl- propyl}-2-cyclopropyl-acetamide hydrochloride	564.1
700	HCI HCI	2-Cyclopropyl-N-{(S)-3-[3-oxo-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide hydrochloride	562.16
701	CI N HCI H	4,4-Difluoro- cyclohexanecarboxylic acid {(S)- 3-[2-(4-chloro-benzyl)-3-oxo-2,8- diaza-spiro[4.5]dec-8-yl]-1- phenyl-propyl}-amide hydrochloride	594.58
702	F HICH HICH	4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-(4-fluoro-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	578.12
703	HCI HCI HCI	4,4-Difluoro- cyclohexanecarboxylic acid {(S)- 3-[2-(4-cyano-benzyl)-3-oxo-2,8- diaza-spiro[4.5]dec-8-yl]-1- phenyl-propyl}-amide hydrochloride	585.14
704	HCI HCI	4,4-Difluoro- cyclohexanecarboxylic acid {(S)- 3-[2-(4-ethoxy-benzyl)-3-oxo- 2,8-diaza-spiro[4.5]dec-8-yl]-1- phenyl-propyl}-amide hydrochloride	604.19
705	HCI HCI H	4,4-Difluoro- cyclohexanecarboxylic acid {(S)- 3-[3-oxo-2-(4-pyrazol-1-yl- benzyl)-2,8-diaza-spiro[4.5]dec- 8-yl]-1-phenyl-propyl}-amide hydrochloride	626.19

706	HCI HCI CI	Cyclopropanecarboxylic acid {(S)-1-(3-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	546.54
707	HCI HCI F	Cyclopropanecarboxylic acid {(S)-1-(3-fluoro-phenyl)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide hydrochloride	530.09
708	HCI HCI H	Cyclopropanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide hydrochloride	518.12
709	HCI HCI S	Cyclopropanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-3-yl-propyl}-amide hydrochloride	518.12
710	HCI HC	N-{(S)-1-(3-Chloro-phenyl)-3-[2- (4-methoxy-benzyl)-3-oxo-2,8- diaza-spiro[4.5]dec-8-yl]-propyl}- isobutyramide hydrochloride	548.56
711	HCI HCI	N-{(S)-1-(3-Fluoro-phenyl)-3-[2- (4-methoxy-benzyl)-3-oxo-2,8- diaza-spiro[4.5]dec-8-yl]-propyl}- isobutyramide hydrochloride	532.1
712	HCI HCI HC	N-{(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-spirc[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-isobutyramide hydrochloride	520.14

713	HCI HCI HCI	N-{(S)-3-[2-(4-Methoxy-benzyl)- 3-oxo-2,8-diaza-spiro[4.5]dec-8- yl]-1-thiophen-3-yl-propyl}- isobutyramide hydrochloride	520.14
714	HCI H-S=0	Propane-2-sulfonic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	550.16
715	HCI HCI	3-{(S)-3-[2-(4-Methoxy-benzyl)- 3-oxo-2,8-diaza-spiro[4.5]dec-8- yl]-1-phenyl-propyl}-1,1- dimethyl-urea hydrochloride	515.1
716	HCI HCI	Morpholine-4-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	557.14
717	HCI HCI N	3,3-Difluoro-pyrrolidine-1-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide hydrochloride	577.12
718	HCI HCI	{(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid methyl ester hydrochloride	502.06
719	HC HC	{(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid ethyl ester hydrochloride	516.08

Example 15. The following assay methods are suitable for evaluating the compounds of the invention.

Chemokine Binding assay: Membranes (lug/well) from 5 human embryonic kidney (HEK-293) cells expressing human CCR5 were incubated with 0.1 nM <sup>125</sup>I-labeled MIP- $1\alpha$  (Amersham) in the presence of varying concentrations of a test compound (10000-0.01 nM) in buffer (50 mM Hepes, pH 7.3/5 mM  $MgCl_2/1$  mM 10 CaCl<sub>2</sub>/0.5% BSA) for 90 min at room temperature. Reaction mixtures (100 µL) were filtered through Multiscreen GFB filters (Millipore) and washed six times with cold wash buffer (50 mM Hepes, pH 7.3/0.5 M NaCl, 0.1% BSA). Bound  $^{125}\text{I-MIP-1}\alpha$  was quantitated 15 by liquid scintillation counting. The nonspecific binding of  $^{125}\text{I-labeled MIP-l}\alpha$  to the membrane was determined based on the radioactivity from the wells added with 100 nM non-radiolabeled MIP-1 $\alpha$ . IC<sub>50</sub> and  $K_D$  values were calculated by using GRAPHPAD PRISM 20 software (Intuitive Software for Science, San Diego).

HIV-1 Replication in PBMC Cultures. Isolated PBMC were stimulated in vitro with 5  $\mu g/ml$ 

- phytohemagglutinin and 50 units/ml IL-2 for 3 days. The cells were resuspended at  $4 \times 10^6/\text{ml}$  in complete medium (RPMI, 10% FBS/50 units/ml IL-2), seeded into 96-well plates (2 ×  $10^5/\text{well}$ ), incubated with inhibitor for 1 h at 37°C, and infected in
- 30 triplicate with 25-100 tissue culture 50% infective

dose (TCID<sub>50</sub>) per well of the R5 HIV-l<sub>JR-FL</sub> strain for 3-4 h. The cells were washed twice in PBS to remove residual virus and cultured in the presence of inhibitor for 4-6 days. HIV-1 replication was determined by the presence of viral RT activity in harvested supernatant fluid. The IC<sub>50</sub> values for the virus were determined by using GRAPHPAD PRISM software.

The preceding examples can be repeated with similar success by substituting the generically or specifically described reactants and/or operating conditions of this invention for those used in the preceding examples.

From the foregoing description, one skilled in the
art can easily ascertain the essential
characteristics of this invention and, without
departing from the spirit and scope thereof, can
make various changes and modifications of the
invention to adapt it to various usages and
conditions.

#### CLAIMS:

1. A compound according to formula (I):

or a pharmaceutically acceptable salt, hydrate or solvate thereof,

#### 10 wherein

5

Y, Z and X are each independently  $CH_2$ , C=0 or  $CR_4R_5$ ;

W is H, optionally substituted  $C_{1-10}$  alkyl (e.g.  $C_{1-6}$  alkyl) optionally substituted  $C_{2-10}$  alkenyl (e.g.  $C_{2-6}$  alkenyl), optionally substituted  $C_{2-10}$  alkynyl (e.g.  $C_{2-6}$  alkynyl), optionally substituted  $C_{6-12}$  aryl, optionally substituted 3 to 10 membered heterocycle, optionally substituted  $C_{6-12}$  aralkyl or optionally substituted  $C_{6-12}$  aralkyl;

 $R_1$  is H, OH, optionally substituted  $C_{1-10}$  alkyl, optionally substituted  $C_{2-10}$  alkenyl, optionally substituted  $C_{2-10}$  alkynyl, optionally substituted  $C_{6-12}$  aryl,  $NR_8R_9$ , optionally substituted  $O-C_{1-6}$  alkyl,

optionally substituted  $O-C_{6-12}$  aryl, optionally substituted  $O-C_{6-12}$  aralkyl,

 $R_2$  is optionally substituted  $C_{1-10}$  alkyl, optionally substituted  $C_{2-10}$  alkenyl, optionally substituted  $C_{2-10}$  alkynyl, optionally substituted  $C_{6-12}$  aryl or optionally substituted 3 to 10 membered heterocycle;

 $R_3$  is H, optionally substituted  $C_{1-10}$  alkyl, optionally substituted  $C_{2-10}$  alkenyl, optionally substituted  $C_{2-10}$  alkynyl, or optionally substituted  $C_{6-12}$  aryl;

 $R_4$  and  $R_5$  are each independently H, optionally substituted  $C_{1-10}$  alkyl, optionally substituted  $C_{2-10}$  alkenyl, optionally substituted  $C_{2-10}$  alkynyl, or optionally substituted  $C_{6-12}$  aryl;

 $R_6$  and  $R''_6$  are each, independently, H, optionally substituted  $C_{1-10}$  alkyl optionally substituted  $C_{2-10}$  alkenyl, or optionally substituted  $C_{2-10}$  alkynyl and  $R_7$  is H, optionally substituted  $C_{1-10}$  alkyl,

- optionally substituted  $C_{2-10}$  alkenyl, optionally substituted  $C_{2-10}$  alkynyl, optionally substituted  $C_{6-12}$  aryl, optionally substituted 3 to 10 membered heterocycle, optionally substituted  $C_{6-12}$  aralkyl or optionally substituted 3 to 10 membered
- 10 heteroaralkyl, or  $R''_6$  and  $R_7$  can be taken together to form an optionally substituted 3 to 10 membered heterocycle; and

 $R_8$  and  $R_9$  are each independently H, optionally substituted  $C_{1-10}$  alkyl, optionally substituted  $C_{2-10}$  alkenyl, or optionally substituted  $C_{2-10}$  alkynyl.

2. A compound according to claim 1, wherein said compound is of formula (Ia):

$$W_X$$
 $N$ 
 $R_1$ 
 $R_3$ 
 $R_2$ 

(Ia)

or a pharmaceutically acceptable salt, hydrate or solvate thereof.

25

3. A compound according to claim 1, wherein said compound is of formula (Ib):

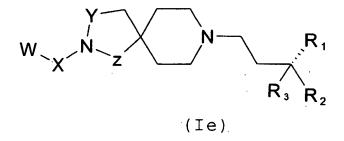
or a pharmaceutically acceptable salt, hydrate or 5 solvate thereof.

4. A compound according to claim 1, wherein said compound is of formula (Ic):

- 10 or a pharmaceutically acceptable salt, hydrate or solvate thereof.
  - 5. A compound according to claim 1, wherein said compound is of formula (Id):

or a pharmaceutically acceptable salt, hydrate or solvate thereof.

6. A compound according to claim 1, wherein said compound is an (S)-enantiomer of formula (Ie):



or a pharmaceutically acceptable salt, hydrate or solvate thereof.

- 7. A compound according to any one of claims 1 to 6, wherein W is  $C_{6-12}$  aryl or 3 to 10 membered heterocycle.
- 15 8. A compound according to any one of claims 1 to  $\epsilon_1$  wherein W is  $C_{6-12}$  aryl.

- 9. A compound according to any one of claims 1 to 6, wherein W is 3 to 10 membered heterocycle.
- 10. A compound according to any one of claims
  5 1 to 9, wherein W is phenyl, phenyl substituted in
  the para (p) position, phenyl substituted with a
  halogen, phenyl substituted with Br, phenyl
  substituted with F, phenyl substituted with Cl,
  phenyl substituted with at least one halogen, phenyl
  10 substituted with a C<sub>1-3</sub> alkoxy, phenyl substituted
  with methoxy, phenyl substituted with SO<sub>2</sub>C<sub>1-3</sub>alkyl,
  phenyl substituted with methanesulfonyl, phenyl
  substituted with halogenated C<sub>1-6</sub> alkyl, phenyl
  substituted with CHF<sub>2</sub>, phenyl substituted with
  15 halogenated C<sub>1-6</sub> alkoxy, phenyl substituted with
  OCF<sub>3</sub>, or pyridine.
  - 11. A compound according to any one of claims 1 to 10, wherein  $R_1$  is:

12. A compound according to any one of claims 25 1 to 10, wherein  $R_1$  is:

(II)

wherein  $R_7$  is  $C_{1-10}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle.

13. A compound according to any one of claims 1 to 10, wherein  $R_1$  is:

(II) , and

- 10 R<sub>7</sub> is methyl, ethyl, isopropyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, 4,4-difluorocyclohexyl, cycloheptyl, CH<sub>2</sub>-cyclopropyl, CH<sub>2</sub>-cyclobutyl, CH<sub>2</sub>-cyclopentyl, or CH<sub>2</sub>-cyclohexyl.
- 15 14. A compound according to any one of claims 1 to 10, wherein  $R_1$  is:

(II) , and

 $R_7$  is phenyl, phenyl substituted with methyl, phenyl substituted with at least one methyl, phenyl

substituted with a halogen, phenyl substituted with at least one halogen, phenyl substituted with Cl, phenyl substituted with Br, phenyl substituted with F, phenyl substituted with at least one Cl, or phenyl substituted with methoxy.

15. A compound according to any one of claims 1 to 10, wherein  $R_1$  is:

(II) , and

- 10 R<sub>7</sub> is benzyl, benzyl substituted with methyl, benzyl substituted with at least one methyl, benzyl substituted with a halogen, benzyl substituted with at least one halogen, benzyl substituted with Cl, benzyl substituted with Br, benzyl substituted with 15 F, benzyl substituted with at least one Cl, benzyl substituted with methoxy, or pyridine.
  - 16. A compound according to any one of claims 1 to 10, wherein  $R_1$  is:

20

(III)

wherein  $R_6$  and  $R^{''}_6$  are each independently H or  $C_{1-4}$  alkyl,  $R_7$  is  $C_{6-12}$  aryl, or  $R^{''}_6$  and  $R_7$  taken together form a 3 to 10 membered heterocycle.

17. A compound according to any one of claims 1 to 10, wherein  $R_1$  is:

10 wherein

 $R_{\rm 6}$  and  $R^{''}_{\rm 6}$  are each, idependently, H or  $C_{1\text{--}4}$  alkyl, and

R<sub>7</sub> is phenyl, phenyl substituted with methyl, phenyl substituted with at least one methyl, phenyl substituted with a halogen, phenyl substituted with at least one halogen, phenyl substituted with Cl, phenyl substituted with Br, phenyl substituted with F, phenyl substituted with at least one Cl, phenyl substituted with methoxy, or naphthyl, or R<sup>"</sup><sub>6</sub> and R<sub>7</sub> taken together form a piperidine.

18. A compound according to any one of claims 1 to 10, wherein  $R_1$  is:

wherein  $R_6$  is H or  $C_{1-4}$  alkyl and  $R_7$  is  $C_{1-10}$  alkyl.

19. A compound according to any one of claims 5 1 to 10, wherein  $R_1$  is:

$$\begin{array}{c}
O \\
N \\
R_6
\end{array}$$
(IV)

wherein  $R_6$  is H or  $C_{1-4}$  alkyl, and  $R_7$  is methyl, ethyl, tert-butyl, cyclobutyl, cyclopentyl, or cyclohexyl.

20. A compound according to any one of claims 1 to 10, wherein  $R_1$  is:

15 (V)

wherein  $R_6$  is H or  $C_{1-4}$  alkyl, and  $R_7$  is optionally substituted  $C_{1-10}$  alkyl, optionally substituted  $C_{6-12}$ 

aryl or optionally substituted 3 to 10 membered heterocycle.

A compound according to any one of claims 5 1 to 10, wherein  $R_1$  is:

(V)

wherein R<sub>6</sub> is H or C<sub>1-4</sub> alkyl, and R<sub>7</sub> is optionally substituted phenyl or optionally substituted  $C_{1\text{--}10}$ 10 alkyl.

22. A compound according to any one of claims 1 to 10, wherein  $R_1$  is:

(VI)

15

wherein  $\mbox{R"}_{6}$  is H or  $\mbox{C}_{1\text{--}4}$  alkyl, and  $\mbox{R}_{7}$  is  $\mbox{C}_{1\text{--}10}$  alkyl or  $C_{6-12}$  aryl.

23. A compound according to any one of claims 20 1 to 10, wherein  $R_1$  is:

(VI)

wherein  $R''_6$  is H or  $C_{1-4}$  alkyl, and  $R_7$  is cyclohexyl or phenyl.

- 5 24. A compound according to any one of claims 1 to 10, wherein  $R_2$  is  $C_{6-12}$  aryl or 3 to 10 membered heterocycle.
- 25. A compound according to any one of claims 10 1 to 24, wherein  $R_2$  is  $C_{6-12}$  aryl.
- 26. A compound according to any one of claims 1 to 24, wherein R<sub>2</sub> is phenyl, phenyl substituted with halogen, phenyl substituted with Cl, phenyl substituted with at least one halogen, phenyl substituted with methoxy, or phenyl substituted with at least one methoxy.
- 27. A compound according to any one of claims 20 1 to 24, wherein  $R_2$  is 3 to 10 membered heterocycle.
  - 28. A compound according to any one of claims 1 to 24, wherein  $R_2$  is thienyl or pyridyl.

- 29. A compound according to any one of claims 1 to 24, wherein  $R_3$  is H or  $C_{1-4}$  alkyl.
- 30. A compound according to any one of claims 1 to 24, wherein  $R_3$  is H or methyl.
  - 31. A compound according to claim 1, wherein said compound is selected from:
  - 2-(4-bromobenzyl)-8-(3-phenyl-propyl)-2,8-diaza-
- 10 spiro[4.5]decan-1-one;
  - 8-(3-phenylpropyl)-2-(4-trifluoromethyl-benzyl)-2,8-diaza-spiro[4.5]decan-1-one;
  - 2-(4-chlorobenzyl)-8-(3-phenyl-propyl)-2,8-diazaspiro[4.5]decan-1-one;
  - 15 2-(4-fluorobenzyl)-8-(3-phenyl-propyl)-2,8-diazaspiro[4.5]decan-1-one;
    - 8-(3-phenyl-propyl)-2-(4-trifluoromethoxy-benzyl)-
    - 2,8-diaza-spiro[4.5]decan-1-one;
    - 2-(4-methylbenzyl)-8-(3-phenyl-propyl)-2,8-diaza-
- 20 spiro[4.5]decan-1-one;
  - 4-[1-oxo-8-(3-phenyl-propyl)-2,8-diaza-
  - spiro[4.5]dec-2-ylmethyl]-benzonitrile;
  - 2-biphenyl-4-ylmethyl-8-(3-phenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one;
- 25 2-naphthalen-2-ylmethyl-8-(3-phenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one;
  - 2-(4-bromobenzyl)-8-(3-phenyl-butyl)-2,8-diaza-spiro[4.5]decan-1-one;
  - 2-(4-bromobenzyl)-8-(3,3-diphenyl-propyl)-2,8-diaza-
- 30 spiro[4.5]decan-1-one;

```
8-(3,3-diphenyl-propyl)-2-(4-trifluoromethoxy-
   benzyl)-2,8-diaza-spiro[4.5]decan-1-one;
   2-(4-bromobenzyl)-8-(3,3-diphenyl-propyl)-2,8-diaza-
   spiro[4.5]decan-3-one;
8-(3,3-diphenyl-propyl)-2-(3-phenyl-propyl)-2,8-
   diaza-spiro[4.5]decan-1-one;
   8-(3,3-diphenyl-propyl)-2-pyridin-4-ylmethyl-2,8-
   diaza-spiro[4.5]decan-1-one;
   8-(3,3-diphenyl-propyl)-2-(4-methoxy-benzyl)-2,8-
10 diaza-spiro[4.5]decan-1-one;
   8-(3,3-diphenyl-propyl)-2-(4-pyrazol-1-yl-benzyl)-
   2,8-diaza-spiro[4.5]decan-1-one;
   2-benzothiazol-2-ylmethyl-8-(3,3-diphenyl-propyl)-
   2,8-diaza-spiro[4.5]decan-1-one;
15 8-(3,3-diphenyl-propyl)-2-(4-methanesulfonyl-
   benzyl) -2,8-diaza-spiro[4.5]decan-1-one;
   8-(3,3-diphenyl-propyl)-2-(3-phenyl-allyl)-2,8-
   diaza-spiro[4.5]decan-1-one;
   8-(3,3-diphenyl-propyl)-2-phenethyl-2,8-diaza-
20 spiro[4.5]decan-1-one;
   2-(4-benzyloxy-benzyl)-8-(3,3-diphenyl-propyl)-2,8-
   diaza-spiro[4.5]decan-1-one;
   2-benzofuran-2-ylmethyl-8-(3,3-diphenyl-propyl)-2,8-
   diaza-spiro[4.5]decan-1-one;
8-(3,3-diphenyl-propyl)-2-(4-isopropyl-benzyl)-2,8-
   diaza-spiro[4.5]decan-1-one;
   2-(5-chloro-benzo[b]thiophen-3-ylmethyl)-8-(3,3-
   diphenyl-propyl)-2,8-diaza-spiro[4.5]decan-1-one;
   8-(3,3-diphenyl-propyl)-2-(4-nitro-benzyl)-2,8-
30 diaza-spiro[4.5]decan-1-one;
```

```
2-(4-bromo-benzyl)-8-(3-pyridin-2-yl-propyl)-2,8-
   diaza-spiro[4.5]decan-1-one;
   2-[1-(4-bromophenyl)-ethyl]-8-(3,3-diphenyl-propyl)-
   2,8-diaza-spiro[4.5]decan-1-one;
5 8-(3,3-diphenyl-propyl)-2-pyridin-3-ylmethyl-2,8-
   diaza-spiro[4.5]decan-1-one;
   N-\{4-[8-(3,3-diphenyl-propyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-2-ylmethyl]-phenyl}-acetamide;
   8-(3,3-diphenyl-propyl)-2-(6-trifluoromethyl-
pyridin-3-ylmethyl)-2,8-diaza-spiro[4.5]decan-1-one;
   4-[8-(3,3-diphenyl-propyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-2-ylmethyl]-benzoic acid;
   8-(3,3-diphenyl-propyl)-2-pyridin-2-ylmethyl-2,8-
   diaza-spiro[4.5]decan-1-one;
   8-(3,3-diphenyl-propyl)-2-(4-
   trifluoromethylsulfanyl-benzyl)-2,8-diaza-
   spiro[4.5]decan-1-one;
   8-(3,3-diphenyl-propyl)-2-(4-methyl-
   cyclohexylmethyl) -2, 8-diaza-spiro[4.5]decan-1-one;
4-[8-(3,3-diphenyl-propyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-2-ylmethyl]-benzoic acid methyl ester;
   8-(3,3-diphenyl-propyl)-2-(5-trifluoromethyl-furan-
   2-ylmethyl)-2,8-diaza-spiro[4.5]decan-1-one;
   8-(3,3-diphenyl-propyl)-2-(4-iodo-benzyl)-2,8-diaza-
25 spiro[4.5]decan-1-one;
   2-(4-methanesulfonylbenzyl)-8-(3-phenyl-butyl)-2,8-
   diaza-spiro[4.5]decan-1-one;
   2-(4-bromobenzyl)-8-[3-hydroxy-3-(2-methoxyphenyl)-
   3-pheny_-propyl]-2,8-diaza-spiro[4.5]decan-1-one;
30 \quad 2-(4-bromobenzyl)-8-[3-hydroxy-3-(3-methoxyphenyl)-
   3-phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one;
```

```
2-(4-bromobenzyl)-8-(3-hydroxy-3-phenyl-3-thiophen-
   2-yl-propyl)-2,8-diaza-spiro[4.5]decan-1-one;
   2-(4-bromobenzyl)-8-(3-hydroxy-3-phenyl-butyl)-2,8-
   diaza-spiro[4.5]decan-1-one;
5 2-(4-bromobenzyl)-8-[3-(2-methoxyphenyl)-3-phenyl-
   propyl]-2,8-diaza-spiro[4.5]decan-1-one;
   2-(4-bromobenzyl)-8-[3-(3-chlorophenyl)-3-hydroxy-3-
   phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one;
   2-(4-bromobenzy1)-8-[3-(4-chloropheny1)-3-hydroxy-3-
10 phenyl-propyl]-2,8-diaza-spiro[4.5]decan-1-one;
   2-(4-bromobenzyl)-8-[3-(3-chlorophenyl)-3-phenyl-
   propyl]-2,8-diaza-spiro[4.5]decan-1-one;
   2-(4-bromobenzyl)-8-(3-phenyl-3-thiophen-2-yl-
   propyl) -2, 8-diaza-spiro[4.5]decan-1-one;
15 2-(4-bromobenzyl)-8-[3-(4-chlorophenyl)-3-phenyl-
   propyl]-2,8-diaza-spiro[4.5]decan-1-one;
   \{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
   8-yl]-1-phenyl-propyl}-carbamic acid tert-butyl
   ester;
20 N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide;
   N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2,6-dimethyl-
   benzamide;
25 cyclohexanecarboxylic acid (3-[2-(4-bromobenzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   amide;
   N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl]-2-phenyl-
```

30 acetamide;

```
N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
    spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(2,4,6-
   trimethyl-phenyl) -acetamide;
   N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
 5 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-phenyl-
   propionamide;
    {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
   8-yl]-1-phenyl-propyl}-methyl-carbamic acid tert-
   butyl ester;
10 N-(3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-N-methyl-
   benzamide;
   cyclohexanecarboxylic acid {3-[2-(4-bromo-benzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
15 methyl-amide;
   N-\{3-[2-(4-bromobenzy1)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-N-methyl-2-
   phenyl-acetamide;
   N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-
20 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-N-methyl-2-
   (2,4,6-trimethyl-phenyl)-acetamide;
   N-\{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-N-methyl-2-
   (2,4,6-trimethyl-phenyl)-acetamide;
25 [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-
   spiro[4.5]dec-8-yl)-1-phenyl-propyl]-carbamic acid
   tert-butyl ester;
   (3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid
30 tert-butyl ester;
```

```
[3-[2-(4-bromobenzy1)-1-oxo-2,8-diaza-spiro[4.5]dec-
   8-yl]-1-(3-chloro-phenyl)-propyl]-carbamic acid
   tert-butyl ester;
   N-(3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
5 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide;
   cyclopropanecarboxylic acid (3-[2-(4-bromo-benzyl)-
   1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-
   propyl } -amide;
   N-(3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-
10 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide;
   N-(3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methyl-
   butyramide;
   N-(3-[2-(4-bromo-benzy1)-1-oxo-2,8-diaza-
15 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-chloro-
   benzamide;
   N-\{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-methoxy-
   benzamide;
20 pyridine-2-carboxylic acid {3-[2-(4-bromobenzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   amide;
   N-(3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-chloro-
25 benzamide;
   N-\{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methoxy-
   benzamide;
   N-\{3-[2-(4-bromobenzy1)-1-oxo-2,8-diaza-
30 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-nicotinamide;
```

```
N-{3-[2-(4-bromobenzy1)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-4-chloro-
   benzamide;
   N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-
 5 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-4-methoxy-
   benzamide;
   N-{3-(2-(4-bromobenzyl)-1-oxo-2,8-diaza-}
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   isonicotinamide;
10 N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3,4-dichloro-
   benzamide;
   N-\{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3,4-dimethoxy-
15 benzamide;
   N-{3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(2-chloro-
   phenyl) -acetamide;
   N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
20 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(2-methoxy-
   phenyl) -acetamide;
   N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3-chloro-
   phenyl) -acetamide;
   N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3-methoxy-
   phenyl) -acetamide;
   N-(3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-pyridin-3-yl-
30 acetamide;
```

```
N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(4-methoxy-
   phenyl) -acetamide;
   N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
5 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3,4-
   dichloro-phenyl)-acetamide;
   tetrahydro-pyran-4-carboxylic acid{3-[2-(4-
   bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-
   phenyl-propyl}-amide;
10 cyclopentanecarboxylic acid (3-[2-(4-bromobenzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   amide;
   cyclobutanecarboxylic acid {3-[2-(4-bromobenzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
15 amide;
   cycloheptanecarboxylic acid {3-[2-(4-bromobenzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   amide;
   N-(3-[2-(4-bromo-benzyl)-1-oxo-2,8-diaza-
20 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclohexyl-
   acetamide;
   N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide;
   cyclopropanecarboxylic acid (3-[2-(4-methoxybenzyl)-
25 1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-
   propyl } -amide;
   N-\{3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide;
   N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
30 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methyl-
   butyramide;
```

```
2-\text{chloro-N-}(3-[2-(4-\text{methoxybenzyl})-1-\text{oxo-}2,8-\text{diaza-}
    spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide;
    2-methoxy-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
    spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide;
 5 pyridine-2-carboxylic acid (3-[2-(4-methoxybenzyl)-
    1-oxo-2, 8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-
   propyl } -amide;
    3-chloro-N-(3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide;
10 3-methoxy-N-(3-[2-(4-methoxy-benzyl)-1-oxo-2,8-
   diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   benzamide;
   N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-nicotinamide;
   4-chloro-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-}
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide;
   4-methoxy-N-{3-[2-(4-methoxy-benzyl)-1-oxo-2,8-
   diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   benzamide;
20 N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   isonicotinamide:
   (R)-cyclohexanecarboxylic acid (3-[2-(4-
   bromobenzyl)-1-oxo-2,8-diaza-spiro [4.5]dec-8-yl]-
25 1(R)-phenyl-propyl}-amide;
   3,4-dichloro-N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-
   diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   benzamide;
   3,4-dimethoxy-N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-
30 diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   benzamide;
```

```
2-(2-\text{chloro-phenyl})-N-{3-[2-(4-\text{methoxybenzyl})-1-\text{oxo-}
   2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   acetamide;
   N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
5 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(2-methox-
   phenyl) -acetamide;
   2-(3-chlorophenyl)-N-{3-[2-(4-methoxybenzyl)-1-oxo-
   2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   acetamide;
N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-10\}
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3-
   methoxyphenyl) -acetamide;
   N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-pyridin-3-yl-
15 acetamide;
   N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(4-
   methoxyphenyl)-acetamide;
   2-(3,4-dichlorophenyl)-N-(3-(2-(4-methoxybenzyl)-1-
20 oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   acetamide;
   tetrahydro-pyran-4-carboxylic acid{3-[2-(4-
   methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-
   1-phenyl-propyl}-amide;
25 cyclopentanecarboxylic acid {3-[2-(4-methoxybenzyl)-
   1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-
   propyl > -amide;
   cyclobutanecarboxylic acid {3-[2-(4-methoxybenzyl)-
   1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-
  propyl } -amide;
```

```
cycloheptanecarboxylic acid {3-[2-(4-methoxybenzyl)-
   1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-
   propyl } -amide;
   2-cyclohexyl-N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-
 5 diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   acetamide;
    (S)-cyclohexanecarboxylic acid {3-[2-(4-
   bromobenzyl) -1-oxo-2, 8-diaza-spiro[4.5]dec-8-yl]-1-
   phenyl-propyl}-amide;
10 N-(3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopentyl-
   acetamide;
   furan-2-carboxylic acid {3-[2-(4-bromobenzyl)-1-oxo-.
   2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl)-
15 amide;
   N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-ethyl-
   butyramide;
   thiophene-2-carboxylic acid {3-[2-(4-brom-benzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   amide;
   N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-y1]-1-phenyl-propyl}-2-(3,4-
   dimethoxyphenyl) -acetamide;
25 2-cyclopentyl-N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-
   diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   acetamide;
   furan-2-carboxylic acid {3-[2-(4-methox-benzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
30
  amide;
```

```
2-ethyl-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-butyramide;
   thiophene-2-carboxylic acid (3-[2-(4-methoxybenzyl)-
   1-oxo-2, 8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-
5 propyl}-amide;
   2-(3,4-dimethoxy-phenyl)-N-(3-[2-(4-methoxybenzyl)-
   1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-
   propyl}-acetamide;
   cyclohexanecarboxylic acid {3-[2-(4-methoxybenzyl)-
10 1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-
   propyl } -amide;
   N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide;
   N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
15 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-phenyl-
   acetamide;
   N-\{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide;
   cyclopropanecarboxylic acid {3-[2-(4-
20 methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl} amide;
   N-{3-[2-(4-methanesulfonyl-benzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide;
   N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-}
25 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methyl-
   butyramide;
   2-chloro-N-(3-[2-(4-methanesulfonylbenzyl)-1-oxo-
   2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   benzamide;
```

```
N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-methoxy-
   benzamde:
   pyridine-2-carboxylic acid {3-[2-(4-
5 methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;
   3-chloro-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-
   2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   benzamide:
N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methoxy-
   benzamide;
   N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-nicotinamide;
   4-chloro-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-
   2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   benzamide;
   N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-}
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-4-methoxy-
20 benzamide;
   N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   isonicotinamide;
   3,4-dichloro-N-{3-[2-(4-methanesulfonylbenzyl)-1-
25 oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   benzamide;
   N-\{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3,4-dimethoxy-
   benzamide;
```

```
2-(2-chlorophenyl)-N-{3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide;
   N-\{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
5 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(2-
   methoxyphenyl) -acetamide;
   2-(3-chlorophenyl)-N-{3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl)-acetamide;
N-\{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(3-
   methoxyphenyl) -acetamide;
   N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-benzamide;
15 (S)-cyclohexanecarboxylic acid [3-(2-benzyl-1-oxo-
   2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-
   amide;
   N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-(4-
20 methoxyphenyl)-acetamide;
   N-\{3-\{2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-phenyl-
   acetamide;
   2-(3,4-dichlorophenyl)-N-{3-[2-(4-
25 methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide;
   cyclopentanecarboxylic acid {3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;
```

```
cyclobutanecarboxylic acid {3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
    spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;
   cycloheptanecarboxylic acid {3-[2-(4-
 5 methanesulfonylbenzyl)-1-oxo-2,8-diaza-
    spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;
    2-cyclohexyl-N-{3-[2-(4-methanesulfonylbenzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   acetamide;
10 2-cyclopentyl-N-(3-[2-(4-methanesulfonylbenzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   acetamide;
   furan-2-carboxylic acid {3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
15 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;
   2-ethyl-N-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-
   diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   butyramide;
   thiophene-2-carboxylic acid {3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;
   2-(3,4-dimethoxyphenyl)-N-{3-[2-(4-methanesulfonyl-
   benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-
   phenyl-propyl}-acetamide;
25 cyclohexanecarboxylic acid {3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;
   4-methyl-cyclohexanecarboxylic acid {3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
30 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;
```

```
2-methoxy-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-
   diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-
   benzamide;
   3-chloro-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-
5 spiro(4.5)dec-8-yl)-1-phenyl-propyl]-benzamide;
   4-chloro-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-
   spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide;
   4-methoxy-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-
   diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-
10 benzamide;
   cyclohexanecarboxylic acid [3-[2-(4-bromobenzyl)-1-
   oxo-2, 8-diaza-spiro[4.5]dec-8-yl]-1-(3-chloro-
   phenyl)-propyl]-amide;
   N-[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
15 spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-
   benzamide;
   N-[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-2-
   phenyl-acetamide;
20 \{1-(3-\text{chlorophenyl})-3-[2-(4-\text{methoxybenzyl})-1-\text{oxo-}\}
   2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid
   tert-butyl ester;
   \{1-(3,4-dichlorophenyl)-3-[2-(4-methoxybenzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic
25 acid tert-butyl ester;
   N-{3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-
   spiro[4.5]dec-8-yl)-1-phenyl-propyl]-acetamide;
   cyclopropanecarboxylic acid [3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-
  propyl]-amide;
```

```
N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-
   spiro[4.5]dec-8-yl)-1-phenyl-propyl]-isobutyramide;
   3-methyl-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-
   spiro[4.5]dec-8-yl)-1-phenyl-propyl]-butyramide;
5 2-chloro-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-
   spiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide;
   pyridine-2-carboxylic acid [3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-
   propyl]-amide;
3-methoxy-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-
   diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-
   benzamide;
   N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-
   spiro[4.5]dec-8-yl)-1-phenyl-propyl]-nicotinamide;
N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-
   spiro[4.5]dec-8-yl)-1-phenyl-propyl]-
   isonicotinamide;
   3,4-dichloro-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-
   diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-
20 benzamide;
   3,4-dimethoxy-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-
   diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-
   benzamide;
   2-(2-chlorophenyl)-N-[3-(1-oxo-2-pyridin-3-ylmethyl-
```

- 25 2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]acetamide;
  - 2-(2-methoxyphenyl)-N-[3-(1-oxo-2-pyridin-3ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenylpropyl]-acetamide;
- 30 N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diazaspiro[4.5]dec-8-yl)-1-phenyl-propyl]-benzamide;

```
2-(3-chloro-phenyl)-N-[3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-
   propyl]-acetamide;
   2-(3-methoxyphenyl)-N-[3-(1-oxo-2-pyridin-3-
5 ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-
   propyl]-acetamide;
   2-(4-methoxyphenyl)-N-[3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-
   propyl]-acetamide;
N-[3-(1-\infty)-2-pyridin-3-ylmethyl-2,8-diaza-
   spiro[4.5]dec-8-yl)-1-phenyl-propyl]-2-phenyl-
   acetamide;
   2-(3,4-dichloro-phenyl)-N-[3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-
15 propyl]-acetamide;
   cyclopentanecarboxylic acid [3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-
   propyl]-amide;
   (1-(3-chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-
  1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic
   acid tert-butyl ester;
   cyclobutanecarboxylic acid [3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-
   propyl]-amide;
25 cycloheptanecarboxylic acid [3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-
   propyl]-amide;
   2-cyclohexyl-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-
   diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-
30
   acetamide;
```

```
2-cyclopentyl-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-
    diaza-spiro[4.5]dec-8-yl)-1-phenyl-propyl]-
    acetamide;
    furan-2-carboxylic acid [3-(1-oxo-2-pyridin-3-
 5 ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-
   propyl]-amide;
    2-ethyl-N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-
    spiro[4.5]dec-8-yl)-1-phenyl-propyl]-butyramide;
   thiophene-2-carboxylic acid [3-(1-oxo-2-pyridin-3-
10 ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-
   propyl]-amide;
   2-(3,4-dimethoxyphenyl)-N-[3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-
   propyl]-acetamide;
15 cyclohexanecarboxylic acid [3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-phenyl-
   propyl]-amide;
   4-methyl-cyclohexanecarboxylic acid [3-(1-oxo-2-
   pyridin-3-ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-
20 phenyl-propyl]-amide;
   [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
   8-yl]-1-(3-methoxyphenyl)-propyl]-carbamic acid
   tert-butyl ester;
   [3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-(3-methoxyphenyl)-propyl]-
   carbamic acid tert-butyl ester;
   (S) -N-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-acetamide;
   (S)-cyclopropanecarboxylic acid {3-[2-(4-
30 bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-
```

phenyl-propyl}-amide;

```
spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide;
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide;
5 (S) -N-\{3-[2-(4-bromobenzy1)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-methyl-
   butyramide;
   (S)-cyclopentanecarboxylic acid {3-[2-(4-
   bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-
10 phenyl-propyl}-amide;
   (S)-cyclobutanecarboxylic acid {3-[2-(4-
   bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-
   phenyl-propyl}-amide;
   [3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
15 spiro[4.5]dec-8-yl]-1-(4-methoxyphenyl)-propyl]-
   carbamic acid tert-butyl ester;
   {3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
   8-yl]-1-pyridin-2-yl-propyl}-carbamic acid tert-
   butyl ester;
20 {3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-carbamic
   acid tert-butyl ester;
   \{1-(3,4-dichlorophenyl)-3-[2-(4-dichlorophenyl)]
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
25 spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl
   ester;
   2-cyclopropyl-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-
   diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   acetamide;
```

```
2-cyclopropyl-N-{3-[2-(4-methanesulfonylbenzyl)-1-
                oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
                acetamide;
                [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
        5 8-yl]-1-(4-methoxyphenyl)-propyl]-carbamic acid
               tert-butyl ester;
                N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
                spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-
               acetamide;
             [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
               8-yl]-1-(3,4-dimethoxyphenyl)-propyl]-carbamic acid
               tert-butyl ester;
               \{1-(3,4-dimethoxyphenyl)-3-[2-(4-methoxybenzyl)-1-
               oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic
15 acid tert-butyl ester;
               tetrahydro-pyran-4-carboxylic acid {3-[2-(4-
               methanesulfonylbenzyl)-1-oxo-2,8-diaza-
               spiro[4.5]dec-8-yl]-1-phenyl-propyl)-amide;
               [3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
     20 spiro[4.5]dec-8-yl]-1-(3-methoxy-phenyl)-propyl]-
               carbamic acid tertbutyl ester;
               (S) - \{3 - [2 - (4 - methanesulfonylbenzyl) - 1 - oxo - 2, 8 - diaza - (4 - methanesulfonylbenzyl) - 1 - oxo - 2, 8 - diaza - (4 - methanesulfonylbenzyl) - 1 - oxo - 2, 8 - diaza - (4 - methanesulfonylbenzyl) - 1 - oxo - 2, 8 - diaza - (4 - methanesulfonylbenzyl) - 1 - oxo - 2, 8 - diaza - (4 - methanesulfonylbenzyl) - 1 - oxo - 2, 8 - diaza - (4 - methanesulfonylbenzyl) - 1 - oxo - 2, 8 - diaza - (4 - methanesulfonylbenzyl) - 1 - oxo - 2, 8 - diaza - (4 - methanesulfonylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbenzylbe
               spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid
              tert-butyl ester;
     25 {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
              spiro[4.5]dec-8-yl]-1-pyridin-2-yl-propyl}-carbamic
              acid tert-butyl ester;
              (1-(3, 4-dimethoxyphenyl)-3-[2-(4-
              methanesulfonylbenzyl)-1-oxo-2,8-diaza-
```

30 spiro[4.5]dec-8-yl]-propyl}-carbamic acid tert-butyl

ester;

```
\{1-(4-\text{chlorophenyl})-3-[2-(4-\text{methoxybenzyl})-1-\text{oxo-}\}
   2,8-diaza-spiro[4.5]dec-8-yl]-propyl)-carbamic acid
   tert-butyl ester;
   \{1-(2-\text{chlorophenyl})-3-[2-(4-\text{methoxybenzyl})-1-\text{oxo-}\}
5 2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic acid
   tert-butyl ester;
   \{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic
   acid tert-butyl ester;
10 [3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-(4-methoxyphenyl)-propyl]-
   carbamic acid tert-butyl ester;
   [3-[2-(4-bromobenzy1)-1-oxo-2,8-diaza-spiro[4.5]dec-
   8-yl]-1-(4-chlorophenyl)-propyl]-carbamic acid tert-
15 butyl ester;
   [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
   8-yl]-1-(2-chlorophenyl)-propyl]-carbamic acid tert-
   butyl ester;
   \{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
20 8-yl]-1-thiophen-2-yl-propyl}-carbamic acid tert-
   butyl ester;
   {1-(4-chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-
   1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic
   acid tert-butyl ester;
25 {1-(2-chlorophenyl)-3-[2-(4-methanesulfonylbenzyl)-
   1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-carbamic
   acid tert-butyl ester;
   {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-carbamic
30 acid tert-butyl ester;
```

```
(S) -N-\{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-
    diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
    isobutyramide;
    [3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
 5 8-yl]-1-(2-methoxyphenyl)-propyl]-carbamic acid
   tert-butyl ester;
    [3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-(2-methoxy-phenyl)-propyl]-
   carbamic acid tert-butyl ester;
10 [1-(2-chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-
   2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid
   tert-butyl ester;
    [1-(3-chlorophenyl)-3-(1-oxo-2-pyridin-3-ylmethyl-
   2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-carbamic acid
15 tert-butyl ester;
   [1-(3,4-dichlorophenyl)-3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-propyl]-
   carbamic acid tert-butyl ester;
   [3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-
20 spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-carbamic
   acid tert-butyl ester;
   (S) -8-[3-(cyclopropanecarbonyl-amino)-3-phenyl-
   propyl]-2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]decane;
25 (S)-8-[3-(cyclopentanecarbonyl-amino)-3-phenyl-
   propyl]-2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5] decane;
   (S) -8-[3-(cyclohexanecarbonyl-amino)-3-phenyl-
   propyl]-2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
30 spiro[4.5]decane;
```

```
(S)-8-[3-(cyclopropanecarbonyl-amino)-3-phenyl-
   propyl]-2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]decane;
   (S)-8-(3-isobutyrylamino-3-phenyl-propyl)-2-(4-isobutyrylamino-3-phenyl-propyl)
5 methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]decane;
   (S)-8-[3-(cyclopentanecarbonyl-amino)-3-phenyl-
   propyl]-2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]decane;
   (S)-8-[3-(cyclohexanecarbonyl-amino)-3-phenyl-
10 propyl]-2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]decane;
   N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-
   isobutyramide;
  cyclobutanecarboxylic acid {3-[2-(4-bromobenzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-
   propyl } -amide;
   cyclopentanecarboxylic acid (3-[2-(4-bromobenzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-
  propyl } -amide;
   N-\{3-[2-(4-bromo-enzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-
   propionamide;
   N-\{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-2-
25
   methoxy-acetamide;
   cyclohexanecarboxylic acid {3-[2-(4-bromobenzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-
   propy1 }-amide;
```

```
cyclopropanecarboxylic acid {3-[2-(4-methoxybenzyl)-
    1-oxo-2, 8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-
   propyl}-amide;
   N-\{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
 5 spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-
    isobutyramide;
    [3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-(2-methoxyphenyl)-propyl]-
   carbamic acid tert-butyl ester;
10 cyclobutanecarboxylic acid {3-[2-(4-methoxybenzyl)-
   1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-
   propyl } -amide;
   cyclopentanecarboxylic acid {3-[2-(4-methoxybenzyl)-
   1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-
15 propyl}-amide;
   N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-
   propionamide;
   2-methoxy-N-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-}
20 spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-
   acetamide;
   cyclohexanecarboxylic acid {3-[2-(4-methoxybenzyl)-
   1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-thiophen-2-yl-
   propyl } -amide;
25 cyclopropane carboxylic acid{3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide;
   N-(3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-
30
   isobutyramide;
```

```
cyclobutanecarboxylic acid {3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide;
   cyclopentanecarboxylic acid {3-[2-(4-
5 methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide;
   N-\{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-
   propionamide;
N-\{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-10\}
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-2-
   methoxy-acetamide;
   cyclohexanecarboxylic acid {3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
15 spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-amide;
   cyclohexanecarboxylic acid [3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-
   yl-propyl]-amide;
   N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-
20 spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-
   isobutyramide;
   cyclobutanecarboxylic acid [3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-
   y1-propy1]-amide;
25 cyclopentanecarboxylic acid [3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-
   yl-propyl]-amide;
   N-[3-(1-oxo-2-pyridin-3-ylmethyl-2,8-diaza-
   spiro[4.5]dec-8-yl)-1-thiophen-2-yl-propyl]-
   propionamide;
```

```
cyclohexanecarboxylic acid [3-(1-oxo-2-pyridin-3-
   ylmethyl-2,8-diaza-spiro[4.5]dec-8-yl)-1-thiophen-2-
   yl-propyl]-amide;
   cyclopropanecarboxylic acid [3-[2-(4-bromobenzyl)-1-
5 oxo-2, 8-diaza-spiro[4.5]dec-8-yl]-1-(3-
   chlorophenyl)-propyl]-amide;
   N-[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-
   isobutyramide;
10 cyclobutanecarboxylic acid [3-[2-(4-bromobenzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-y1]-1-(3-
   chlorophenyl)-propyl]-amide;
   cyclopentanecarboxylic acid [3-[2-(4-bromobenzyl)-1-
   oxo-2, 8-diaza-spiro[4.5]dec-8-yl]-1-(3-
15 chlorophenyl)-propyl]-amide;
   N-[3-[2-(4-bromobenzy1)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-
   propionamide;
   N-[3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
spiro[4.5]dec-8-yl]-1-(3-chlorophenyl)-propyl]-2-
   methoxy-acetamide;
   piperidine-1-carboxylic acid {3-[2-(4-bromobenzyl)-
   1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-
   propyl } -amide;
25 piperidine-1-carboxylic acid {3-[2-(4-
   methoxybenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-
   1-phenyl-propyl}-amide;
   piperidine-1-carboxylic acid {3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
30 spiro[4.5]dec-8-yl]-1-phenyl-propyl}amide;
```

```
1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-phenyl-urea;
   1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(2-chloro-
5 phenyl)-urea;
   1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(2-methoxy-
   phenyl) -urea;
   1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
10 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(3-chloro-
   phenyl)-urea;
   1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(3-methoxy-
   phenyl)-urea;
15 1-(3-(2-(4-bromobenzy1)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl)-3-(4-chloro-
   phenyl) -urea;
   1-{3-[2-(4-bromobenzy1)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(4-methoxy-
20 phenyl)-urea;
   1-{3-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(2,6-
   dimethyl-phenyl)-urea;
   1-{3-[2-(4-bromobenzy1)-1-oxo-2,8-diaza-
25 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-naphthalen-1-
   yl-urea;
   1-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-phenyl-urea;
   1-(2-chlorophenyl)-3-(3-[2-(4-methoxybenzyl)-1-oxo-
   2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-urea;
```

```
1-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(2-
   methoxyphenyl) -urea;
    1-(3-chlorophenyl)-3-\{3-[2-(4-methoxybenzyl)-1-oxo-
 5 2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-urea;
   1-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(3-
   methoxyphenyl)-urea;
   -(3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
10 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(4-
   methoxyphenyl) -urea;
   1-(2,6-dimethylphenyl)-3-(3-[2-(4-methoxybenzyl)-1-
   oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   urea;
15 1-{3-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-naphthalen-1-
   yl-urea;
   1-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-phenyl-urea;
20 1-(2-chlorophenyl)-3-{3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-urea;
   1-{3-[2-(4-methanesulfonylbenzyl)--oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(2-
25 methoxyphenyl)-urea;
   1-(3-chloropheny1)-3-\{3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-urea;
   1-\{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
30 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(3-
   methoxyphenyl)-urea;
```

```
1-(4-chlorophenyl)-3-{3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-urea;
   1-{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
5 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-(4-
   methoxyphenyl) -urea;
   1-(2,6-dimethylphenyl)-3-(3-[2-(4-
   methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-urea;
10 \quad 1-\{3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-3-naphthalen-1-
   vl-urea;
   {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid
15 methyl ester;
   {3-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid
   ethyl ester;
   4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
20 8-y1]-2-phenyl-butyric acid methyl ester;
   4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-2-phenyl-butyric acid methyl
   ester;
   4-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-
25 spiro[4.5]dec-8-yl]-2-phenyl-butyric acid methyl
   ester;
   4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
   8-yl]-2, N-diphenyl-butyramide;
   N-benzyl-4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-
30 spiro[4.5]dec-8-yl]-2-phenyl-butyramide;
```

```
2-(4-bromobenzyl)-8-(4-oxo-3-phenyl-4-piperidin-1-
   yl-butyl)-2,8-diaza-spiro[4.5]decan-1-one;
   4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
   8-yl]-N-cyclohexyl-2-phenyl-butyramide;
 5 4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
   8-yl]-N-cyclohexyl-N-methyl-2-phenyl-butyramide;
   4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
   8-yl]-N-cyclopropyl-2-phenyl-butyramide;
   4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
10 8-yl]-N-cyclobutyl-2-phenyl-butyramide;
   N-cyclohexyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-
   2,8-diaza-spiro[4.5]dec-8-yl]-N-methyl-2-phenyl-
   butyramide;
   N-cyclopropyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-
15 2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide;
   N-cyclobutyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-
   2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide;
   4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
   8-y1]-N-cyclopentyl-2-phenyl-butyramide;
20 4-[2-(4-bromobenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-
   8-y1]-N-isopropyl-2-phenyl-butyramide;
   N-benzyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-
   diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide;
   2-(4-methanesulfonylbenzyl)-8-(4-oxo-3-phenyl-4-
25 piperidin-1-yl-butyl)-2,8-diaza-spiro[4.5]decan-1-
   one;
   N-cyclohexyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-
   2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide;
   N-cyclopentyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-
   2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide;
```

N-isopropyl-4-[2-(4-methanesulfonylbenzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide; 4-[2-(4-methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-y1]-2, N-diphenyl-butyramide; 5 N-benzyl-4-[2-(4-methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-2-phenyl-butyramide; 2-(4-methoxybenzyl)-8-(4-oxo-3-phenyl-4-piperidin-1yl-butyl) -2,8-diaza-spiro[4.5]decan-1-one; N-cyclohexyl-4-[2-(4-methoxybenzyl)-1-oxo-2,8-diaza-10 spiro[4.5]dec-8-yl]-2-phenyl-butyramide; N-cyclopropyl-4-[2-(4-methoxybenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide; N-cyclobutyl-4-[2-(4-methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-2-phenyl-butyramide; 15 N-cyclopentyl-4-[2-(4-methoxybenzyl)-1-oxo-2,8diaza-spiro[4.5]dec-8-yl]-2-phenyl-butyramide; N-isopropyl-4-[2-(4-methoxybenzyl)-1-oxo-2,8-diazaspiro[4.5]dec-8-yl]-2-phenyl-butyramide; and pharmaceutically acceptable salts, hydrates and solvates thereof. 20

32. A compound according to claim 1, wherein said compound is selected from:

Cyclopropanecarboxylic acid {(S)-1-(3-chloro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide;

Cyclopropanecarboxylic acid {(S)-1-(3-fluoro-phenyl)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-amide;

Cyclopropanecarboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-

```
thiophen-2-yl-propyl}-amide;
    Cyclopropanecarboxylic acid {(S)-3-[2-(4-methoxy-
    benzyl)-1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-
    thiophen-3-yl-propyl}-amide;
 5 N-{(S)-1-(3-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-
    1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-
    isobutyramide;
   N-\{(S)-1-(3-Fluoro-phenyl)-3-[2-(4-methoxy-benzyl)-
   1-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-
10 isobutyramide;
   N-\{(S)-3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-
   isobutyramide;
   N-\{(S)-3-[2-(4-Methoxy-benzyl)-1-oxo-2,8-diaza-
15 spiro[4.5]dec-8-yl]-1-thiophen-3-yl-propyl}-
   isobutyramide;
   N-\{(S)-3-[2-(4-Chloro-benzyl)-3-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide;
   N-\{(S)-3-[2-(4-Fluoro-benzyl)-3-oxo-2,8-diaza-
20 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide;
   N-\{(S)-3-[2-(4-Cyano-benzy1)-3-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl}-1-phenyl-propyl}-isobutyramide;
   N-\{(S)-3-[2-(4-Ethoxy-benzyl)-3-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide;
25 N-\{(S)-3-[2-(4-Difluoromethoxy-benzyl)-3-oxo-2,8-
   diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   isobutyramide;
   N-\{(S)-3-[3-0xo-2-(4-trifluoromethoxy-benzyl)-2,8-
   diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
30 isobutyramide;
   N-\{(S)-3-[3-0xo-2-(4-trifluoromethyl-benzyl)-2,8-
```

```
diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   isobutyramide;
   N-\{(S)-3-[3-0xo-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-isobutyramide;
5 Cyclopropanecarboxylic acid {(S)-3-[2-(4-chloro-
   benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-
   phenyl-propyl}-amide;
   Cyclopropanecarboxylic acid {(S)-3-[2-(4-fluoro-
   benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-
10 phenyl-propyl}-amide;
   Cyclopropanecarboxylic acid {(S)-3-[2-(4-cyano-
   benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-
   phenyl-propyl}-amide;
   Cyclopropanecarboxylic acid {(S)-3-[2-(4-ethoxy-
15 benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-
   phenyl-propyl}-amide;
   Cyclopropanecarboxylic acid {(S)-3-[2-(4-
   difluoromethoxy-benzyl)-3-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;
20 Cyclopropanecarboxylic acid {(S)-3-[2-(4-
   trifluoromethoxy-benzyl)-3-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;
   Cyclopropanecarboxylic acid {(S)-3-[2-(4-
   trifluoromethyl-benzyl)-3-oxo-2,8-diaza-
25 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;
   Cyclopropanecarboxylic acid {(S)-3-[3-oxo-2-(4-
   pyrazol-1-yl-benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-
   1-phenyl-propyl}-amide;
   2-Cyclopropyl-N-{(S)-3-[2-(4-methoxy-benzyl)-3-oxo-
30 2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-
   acetamide;
```

```
N-\{(S)-3-[2-(4-Chloro-benzyl)-3-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-
   acetamide;
   N-\{(S)-3-[2-(4-Fluoro-benzyl)-3-oxo-2,8-diaza-
5 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-
   acetamide;
   N-\{(S)-3-[2-(4-Cyano-benzyl)-3-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-
   acetamide;
10 N-\{(S)-3-[2-(4-Ethoxy-benzyl)-3-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-cyclopropyl-
   acetamide;
   N-\{(S)-3-[2-(4-Diffluoromethoxy-benzyl)-3-oxo-2,8-
   diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-
15 cyclopropyl-acetamide;
   N-\{(S)-3-[2-(4-Trifluoromethoxy-benzyl)-3-oxo-2,8-
   diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-
   cyclopropyl-acetamide;
   N-\{(S)-3-[2-(4-Trifluoromethyl-benzyl)-3-oxo-2,8-
20 diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-2-
   cyclopropyl-acetamide;
   2-Cyclopropyl-N-{(S)-3-[3-oxo-2-(4-pyrazol-1-yl-
   benzyl)-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-
   propyl } -acetamide;
25 4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-
   (4-chloro-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-
   yl]-1-phenyl-propyl}-amide;
   4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-
   (4-fluoro-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-
30 yl]-1-phenyl-propyl}-amide;
```

4,4-Difluoro-cyclohexanecarboxylic acid ((S)-3-[2-

```
(4-cyano-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-
   yl]-1-phenyl-propyl}-amide;
   4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[2-
    (4-ethoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-
5 yl]-1-phenyl-propyl}-amide;
   4,4-Difluoro-cyclohexanecarboxylic acid {(S)-3-[3-
   oxo-2-(4-pyrazol-1-yl-benzyl)-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;
   Cyclopropanecarboxylic acid {(S)-1-(3-chloro-
10 phenyl)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-propyl}-amide;
   Cyclopropanecarboxylic acid {(S)-1-(3-fluoro-
   phenyl)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-propyl}-amide;
15 Cyclopropanecarboxylic acid {(S)-3-[2-(4-methoxy-
   benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-
   thiophen-2-yl-propyl}-amide;
   Cyclopropanecarboxylic acid ((S)-3-[2-(4-methoxy-
   benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-
20 thiophen-3-yl-propyl}-amide;
   N-\{(S)-1-(3-Chloro-phenyl)-3-[2-(4-methoxy-benzyl)-
   3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-
   isobutyramide;
   N-\{(S)-1-(3-Fluoro-phenyl)-3-[2-(4-methoxy-benzyl)-
25 3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-propyl}-
   isobutyramide;
   N-\{(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-2-yl-propyl}-
   isobutyramide;
30 N-\{(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-
   spiro[4.5]dec-8-yl]-1-thiophen-3-yl-propyl}-
```

isobutyramide;

Propane-2-sulfonic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;

5 3-{(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-1,1-dimethyl-urea;

Morpholine-4-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-

10 phenyl-propyl}-amide;

3,3-Difluoro-pyrrolidine-1-carboxylic acid {(S)-3-[2-(4-methoxy-benzyl)-3-oxo-2,8-diaza-spiro[4.5]dec-8-yl]-1-phenyl-propyl}-amide;

 ${(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diaza-}$ 

15 spiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid
 methyl ester;

{(S)-3-[2-(4-Methoxy-benzyl)-3-oxo-2,8-diazaspiro[4.5]dec-8-yl]-1-phenyl-propyl}-carbamic acid ethyl ester;

20

and pharmaceutically acceptable salts, hydrates or solvates thereof.

- 33. A compound according to claim 1, wherein:
- 25 Y, Z and X are each, independently,  $CH_2$ , C=0 or  $CR_4R_5$ ;

W is H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl, 3 to 10 membered heterocycle,  $C_{6-12}$  aralkyl or  $C_{3-10}$  heteroaralkyl;  $R_1$  is H,  $C_{1-6}$  alkyl,  $C_{6-12}$  aryl, OH,  $NR_8R_9$ ,  $O-C_{1-6}$  alkyl,

30  $O-C_{6-12}$  aryl,  $O-C_{6-12}$  aralkyl,

 $R_2$  is  $C_{1-10}$  alkyl,  $C_{6-12}$  aryl or 3 to 10 membered heterocycle;

5  $R_3$  is H,  $C_{1-6}$  alkyl or  $C_{6-12}$  aryl;  $R_4$  and  $R_5$  are each, independently, H,  $C_{1-6}$  alkyl or  $C_{6-12}$  aryl;

 $R_6$  is H or  $C_{1-4}$  alkyl;

 $R_7$  is H,  $C_{1-10}$  alkyl,  $C_{6-12}$  aryl, 3 to 10 membered heterocycle,  $C_{6-12}$  aralkyl or 3 to 10 membered heteroaralkyl; or

 $R''_{6}$  and  $R_{7}$  can also be taken together to form a 3 to 10 membered heterocycle; and

 $R_8$  and  $R_9$  are each, independently, H or  $C_{1-6}$  alkyl.

15

34. A method of modulating chemokine receptor activity in a subject comprising administering to the subject an effective amount of a compound of according to claim 1.

20

- 35. A method of preventing or treating at least one disease associated with the modulation of chemokine receptor activity in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a compound of according to claim 1.
- 36. A method of preventing or treating at least one inflammatory disease, immunoregulatory

  10 disease, organ transplantation reaction, or infectious disease in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a compound of according to claim 1.

15

- 37. A method of preventing or treating an HIV infection in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a compound of according to claim 1.
- 38. A method of preventing or treating at least one disease associated with the modulation of CCR5 chemokine receptor activity in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a compound of according to claim 1.
- 39. A method of blocking cellular entry of HIV30 in a subject in need thereof comprising administering to the subject an effective amount of

a compound according to claim 1 to block HIV from cellular entry in said subject.

- 40. A method of delaying the onset of AIDS or treating AIDS in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a compound according to claim 1.
- 10 41. A method of preventing or treating of a disease associated with the modulation of chemokine receptor activity in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a combination of a compound according to claim 1 and at least one further therapeutic agent.
- 42. A method of preventing or treating of a disease associated with the modulation of CCR5

  20 chemokine receptor activity in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a combination of a compound according to claim 1 and at least one further therapeutic agent.

25

43. A method of blocking cellular entry of HIV in a subject or for the prevention or treatment of HIV infections in a subject in need of such treatment comprising administering to the subject a

30 therapeutically effective amount of a combination of

a compound according to claim 1 and at least one further therapeutic agent.

44. A method for delaying the onset of AIDS or treating AIDS in a subject in need of such treatment comprising administering to the subject a therapeutically effective amount of a combination of a compound according to claim 1 and at least one further therapeutic agent.

10

- 45. A method according to claim 34, wherein said compound is administered in an amount of 0.1 750 mg/kg of body weight per day.
- 15 46. A method according to claim 35, wherein said compound is administered in an amount of 0.1 750 mg/kg of body weight per day.
- 47. A method according to claim 36, wherein
  20 said compound is administered in an amount of 0.1 750 mg/kg of body weight per day.
- 48. A method according to claim 37, wherein said compound is administered in an amount of 0.1 750 mg/kg of body weight per day.
  - 49. A method according to claim 38, wherein said compound is administered in an amount of 0.1 750 mg/kg of body weight per day.

- 50. A method according to claim 39, wherein said compound is administered in an amount of 0.1 750 mg/kg of body weight per day.
- 5 51. A method according to claim 40, wherein said compound is administered in an amount of 0.1 750 mg/kg of body weight per day.
- 52. A method according to claim 41, wherein said compound is administered in an amount of 0.1 750 mg/kg of body weight per day.
- 53. A method according to claim 42, wherein said compound is administered in an amount of 0.1 15 750 mg/kg of body weight per day.
  - 54. A method according to claim 43, wherein said compound is administered in an amount of 0.1 750 mg/kg of body weight per day.

20

- 55. A method according to claim 44, wherein said compound is administered in an amount of 0.1 750 mg/kg of body weight per day.
- 56. A method according to claim 34, wherein said subject is a human.
  - 57. A method according to claim 35, wherein said subject is a human.

- 58. A method according to claim 36, wherein said subject is a human.
- 59. A method according to claim 37, wherein 5 said subject is a human.
  - 60. A method according to claim 38, wherein said subject is a human.
- 10 61. A method according to claim 39, wherein said subject is a human.
  - 62. A method according to claim 40, wherein said subject is a human.

- 63. A method according to claim 41, wherein said subject is a human.
- 64. A method according to claim 42, wherein 20 said subject is a human.
  - 65. A method according to claim 43, wherein said subject is a human.
- 25 66. A method according to claim 44, wherein said subject is a human.
- 67. A pharmaceutical composition comprising a compound according to any one of claims 1 to 33, or 30 a pharmaceutically acceptable salt, solvate or

hydrate thereof, and a pharmaceutically acceptable carrier.

- 68. A composition according to claim 67,5 further comprising at least one further therapeutic agent.
- 69. A pharmaceutical combination comprising a compound according to any one of claims 1 to 33, or a pharmaceutically acceptable salt, solvate or hydrate thereof, and at least one further therapeutic agent.
  - 70. A combination according to claim 69, wherein
- 15 said at least one further therapeutic agent is an antiviral agent.
  - 71. A combination according to claim 69, wherein
- 20 said at least one further therapeutic agent is selected from nucleoside and nucleotide analog reverse transcriptase inhibitors, non-nucleoside reverse transcriptase inhibitors, protease inhibitors, attachment and fusion inhibitors,
- 25 integrase inhibitors and maturation inhibitors.
  - 72. A combination according to claim 70, wherein said antiviral agent is selected from 3TC
- On (lamivudine, Epivir®), AZT (zidovudine, Retrovir®), Emtricitabine (Coviracil®, formerly FTC), d4T

- (2',3'-dideoxy-2',3'-didehydro-thymidine, stavudine and Zerit®), tenofovir (Viread®), 2',3'-dideoxyinosine (ddl, didanosine, Videx®), 2',3'-dideoxycytidine (ddC, zalcitabine, Hivid®),
- 5 Combivir® (AZT/3TC or zidovudine/lamivudine combination), Trivizir® (AZT/3TC/abacavir or zidovudine/lamivudine/abacavir combination), abacavir (1592U89, Ziagen®), SPD-754, ACH-126,443 (Beta-L-Fd4C), Alovudine (MIV-310), DAPD
- 10 (amdoxovir), Racivir, 9-[(2-hydroxymethyl)-1,3dioxolan-4-yl]guanine and 2-amino-9-[(2hydroxymethyl)-1,3-dioxolan-4-yl]adenine.
- 73. A combination according to claim 70,
  wherein
  said antiviral agent is selected from Nevirapine
  (Viramune®, NVP, BI-RG-587), delavirdine
  (Rescriptor®, DLV), efavirenz (DMP 266, Sustiva®),
  (+)-Calanolide A, Capravirine (AG1549, formerly S1153), DPC083, MIV-150, TMC120, TMC125 or BHAP
  (delavirdine), calanolides or L-697,661 (2Pyridinone 3benzoxazolMeNH derivative).
- 74. A combination according to claim 70,

  wherein
  said antiviral agent is selected from nelfinavir
  (Viracept®, NFV), amprenavir (141W94, Agenerase®),
  indinavir (MK-639, IDV, Crixivan®), saquinavir
  (Invirase®, Fortovase®, SQV), ritonavir (Norvir®,

  RTV), lopinavir (ABT-378, Kaletra®), Atazanavir
  (BMS232632), mozenavir (DMP-450), fosamprenavir

(GW433908), RO033-4649, Tipranavir (PNU-140690), TMC114 and VX-385.

- 75. A combination according to claim 70,

  5 wherein
  said antiviral agent is selected from T-20
  (enfuvirtide, Fuzeon®), T-1249, Schering C (SCH-C),
  Schering D (SCH-D), FP21399, PRO-140, PRO 542, PRO
  452, TNX-355, GW873140 (AK602), TAK-220, UK-427,857

  10 or soluble CD4, CD4 fragments, CD4-hybrid molecules,
  BMS-806, BMS-488043, AMD3100, AMD070 and KRH-2731.
  - 76. A combination according to claim 70, wherein
- 15 said antiviral agent is selected from S-1360, L-870,810, L-870,812 and C-2507.
  - 77. A combination according to claim 70, wherein
  - 20 said antiviral agent is PA-457.
    - $78.\ \ A$  combination according to claim 70, wherein

said antiviral agent is azodicarbonamide (ADA).

25

79. A combination according to claim 70, wherein said antiviral agent is HGTV43.

80. A combination according to claim 70, wherein

said antiviral agent is selected from interleukin-2 (IL-2, Aldesleukin, Proleukin), granulocyte

5 macrophage colony stimulating factor (GM-CSF), erythropoietin, Multikine, Ampligen, thymomodulin, thymopentin, foscarnet, HE2000, Reticulose, Murabutide, Resveratrol, HRG214, HIV-1 Immunogen (Remune) and EP HIV-1090.

. 10

- 81. A combination according to claim 70, wherein said antiviral agent is selected from 2',3'-dideoxyadenosine, 3'-deoxythymidine, 2',3'-dideoxy-2',3'-didehydrocytidine,ribavirin, acyclovir, ganciclovir, alpha-, beta-and gamma-interferon, probenecid, TIBO drugs, HEPT, and TSAO derivatives.
- 82. A compound of any one of claims 1 to 33, 20 or a pharmaceutically acceptable salt, solvate or hydrate thereof for use in modulating chemokine receptor activity in a subject.
- 83. Use of a compound of any one of claims 1
  25 to 33, or a pharmaceutically acceptable salt,
  solvate or hydrate thereof, in the manufacture of a
  medicament for preventing or treating at least one
  disease associated with the modulation of chemokine
  receptor activity in a subject in need of such
  30 treatment.

- 84. Use of a compound of any one of claims 1 to 33, or a pharmaceutically acceptable salt, solvate or hydrate thereof, in the manufacture of a medicament for preventing or treating at least one inflammatory disease, immunoregulatory disease, organ transplantation reaction, or infectious disease in a subject in need of such treatment.
- 85. Use of a compound of any one of claims 1
  10 to 33, or a pharmaceutically acceptable salt,
  solvate or hydrate thereof, in the manufacture of a
  medicament for preventing or treating an HIV
  infection in a subject in need of such treatment.
- 15 86. Use of a compound of any one of claims 1 to 33, or a pharmaceutically acceptable salt, solvate or hydrate thereof, in the manufacture of a medicament for preventing or treating at least one disease associated with the modulation of CCR5 chemokine receptor activity in a subject in need of such treatment.
- 87. Use of a compound of any one of claims 1 to 33, or a pharmaceutically acceptable salt,
  25 solvate or hydrate thereof, in the manufacture of a medicament for blocking cellular entry of HIV in a subject in need thereof.
- 88. Use of a compound of any one of claims 1 to 30 33, or a pharmaceutically acceptable salt, solvate or hydrate thereof, in the manufacture of a medicament

for delaying the onset of AIDS or treating AIDS in a subject in need of such treatment.

89. Use of a compound of any one of claims 1 to 33, or a pharmaceutically acceptable salt, solvate or hydrate thereof, in the manufacture of a medicament for preventing or treating of a disease associated with the modulation of chemokine receptor activity in a subject in need of such treatment.

10

- 90. Use of a compound of any one of claims 1 to 33, or a pharmaceutically acceptable salt, solvate or hydrate thereof, in the manufacture of a medicament for preventing or treating of a disease associated with the modulation of CCR5 chemokine receptor activity in a subject in need of such treatment.
- 91. Use of a compound of any one of claims 1 to 33, or a pharmaceutically acceptable salt, solvate or 20 hydrate thereof, in the manufacture of a medicament for blocking cellular entry of HIV in a subject or for the prevention or treatment of HIV infections in a subject in need of such treatment.
- 92. Use of a compound of any one of claims 1 to 33, or a pharmaceutically acceptable salt, solvate or hydrate thereof, in the manufacture of a medicament for delaying the onset of AIDS or treating AIDS in a subject in need of such treatment.

93. A compound of formula (I), as defined in any one of claims 1 to 33, or a pharmaceutically acceptable salt, solvate or hydrate thereof, for use 5 in medical therapy.

International Application No CT/CA2004/001048

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C070471/10 A61K IPC 7 A61P31/18 A61K31/437 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) CO7D A61K A61P Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No X E. JUCKER ET. AL.: "Über neuartige 1-3,29, 30,33, 67,93 Spiro-succinimide" ARCHIV DER PHARMAZIE, vol. 294, 1961, pages 210-220, XP009042111 page 213, compound 16; page 211, paragraph Α US 6 291 469 B1 (FISHER ET. AL.) 1 - 9318 September 2001 (2001-09-18) column 1, line 15 - column 2, line 15; claims; examples WO 01/30780 A (COR THERAPEUTICS) Α 1 - 933 May 2001 (2001-05-03) page 1, line 9 - line 31; claims; examples Further documents are listed in the continuation of box C Patent family members are listed in annex Special categories of cited documents \*T\* later document published after the international filing date or pnortly date and not in conflict with the application but cited to understand the principle or theory underlying the 'A" document defining the general state of the lart which is not considered to be of particular relevance invention 'E' earlier document but published on or after the international \*X\* document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to filing date "L" document which may throw doubts on priority daim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ... ments, such combination being obvious to a person skilled in the art document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 4 January 2005 12/01/2005 Authorized officer Name and mailing address of the ISA European Patent Office, P B 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel (+31-70) 340-2040, Tx 31 651 epo ni, Helps, I

Form PCT/ISA/210 (second sheet) (January 2004)

Fax (+31-70) 340-3016

International Application No CT/CA2004/001048

	CT/CA2004/0							
C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT  Category • Citation of document, with indication, where appropriate, of the relevant passages  Relevant to claim No								
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Helevant to claim No						
Ą	US 5 962 462 A (MILLS ET. AL.) 5 October 1999 (1999-10-05) column 1, line 12 - column 3, line 23; claims; examples	1-93						
Α	WO 03/037271 A (MILLENIUM PHARMACEUTICALS INC.) 8 May 2003 (2003-05-08) Table 7, compounds 16-3, 16-4; pages 1-2; claims	1-93						
ı								
;								
	•							

Form PCT/ISA/210 (continuation of second sheet) (January 2004)



Box II	Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)						
This Inte	rnational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:						
1. χ	Claims Nos.: 34-66 (part) because they relate to subject matter hot required to be searched by this Authority, namely:  Although claims 34-66 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged						
2.	effects of the compound/composition.  Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:						
з. 🗌	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).						
Box III	Observations where unity of invention is lacking (Continuation of item 3 of first sheet)						
This Inte	rnational Searching Authority found multiple inventions in this international application, as follows:						
1.	As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.						
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.						
3.	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:						
4.	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:						
Remark	on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.						

Form PCT/ISA/210 (continuation of first sheet (2)) (January 2004)

Information on patent family members

International Application No CT/CA2004/001048

Patent document cited in search report		Publication date	Patent family member(s)			Publication date
US 6291469	B1	18-09-2001	US	2003171373	A1	11-09-2003
•			US	2002013325	A1	31-01-2002
			ΑT	274499	T	15-09-2004
			ΑU	713235		25-11-1999
			AU	7382896	Α	17-04-1997
		,	CA	2233204		03-04-1997
			DE	69633245		30-09-2004
			EΡ	0854869		29-07-1998
			JP	11512723		02-11-1999
			NZ	320963		30-08-1999
			WO	9711940	A1	03-04-1997
WO 0130780	Α	03-05-2001	AT	250604	T	15-10-2003
			AU	1244001	Α	08-05-2001
			CA	2389034	A1	03-05-2001
			DE	60005545	D1	30-10-2003
			EP	1224186		24-07-2002
			JP	2003514777		22-04-2003
			WO	0130780		03-05-2001
•			US	2003055244	A1	20-03-2003
US 5962462	A	05-10-1999	AU	5803398	A	03-07-1998
			WO	9825605	A1	18-06-1998
WO 2003037271		08-05-2003	WO.	03037271	A2	08-05-2003